

Volume

#

R0282

INDEX DIAGRAM.

Township 42 S., Range 14 W.

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PRELIMINARY OATHS OF ASSISTANTS.

and
 We, _____, do solemnly swear that we will well and faithfully execute the duties of assistants, that we will level the chain over even and uneven ground, and plumb the tally pin, either by sight or by applying three times the we will report the true distances to all notable objects, and the true position of all objects that we meet in measuring, to the best of our skill and ability, and in accordance with the instructions given us, in the survey of _____.

Chairman

Chairman

Subscribed and sworn to before me this _____

day of _____, 189



and
 We, _____, do solemnly swear that we will well and truly perform the duties of assistants, that we will level the chain over even and uneven ground, and plumb the tally pin, either by sight or by applying three times the we will report the true distances to all notable objects, and the true position of all objects that we meet in measuring, to the best of our skill and ability, and in accordance with the instructions given us, in the survey of _____.

Recorder

Recorder

Subscribed and sworn to before me this _____

day of _____, 189



and
 We, _____, do solemnly swear that we will well and truly perform the duties of assistants, that we will level the chain over even and uneven ground, and plumb the tally pin, either by sight or by applying three times the we will report the true distances to all notable objects, and the true position of all objects that we meet in measuring, to the best of our skill and ability, and in accordance with the instructions given us, in the survey of _____.

Recorder

Recorder

Subscribed and sworn to before me this _____

day of _____, 189



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____.

Flagman

Subscribed and sworn to before me this _____

day of _____, 189



BOOK A-282

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

_____, Chainman.

_____, Chainman.

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, Moundman.

_____, Moundman.

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, Axman.

_____, Axman.

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, Flagman.

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



BOOK A-282

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PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

_____, Chainman.

_____, Chainman.

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, Moundman.

_____, Moundman.

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, Axman.

_____, Axman.

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, Flagman.

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



BOOK A-282

FIELD NOTES

OF THE SURVEY OF THE

SOUTH BOUNDARY

OF

TOWNSHIP NO. 42 SOUTH, RANGE NO. 14 WEST,

Of the Salt Lake Base and Meridian,

in the State of Utah.

AS SURVEYED BY

Wayhew H. Dalley, United States Deputy Surveyor,

under his Contract No. 224, dated January 23, 1892, 189

survey commenced May 22, 1892, 189

survey completed May 25, 1892, 189

NAMES AND DUTIES OF ASSISTANTS.

Albert C. Dalley,

Chainman.

Heber Dalley,

Chainman.

Daniel S. Macfarlane,

Houndman.

David Dix,

Houndman.

Daniel S. Macfarlane,

Axman .

Henry Houchen,

Axman.

David Dix,

Flagman.

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BOOK A-282

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE Albert C. Dalley and Heber Dalley

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the South boundary of Township No. 42 South, Range No. 14 West, of the Salt Lake Base & Meridian, in the State of Utah.

Albert C. Dalley Chainman

Heber Dalley Chainman

Subscribed and sworn to before me this 12th

day of May 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley

Notary Public

WE Daniel S. Macfarlane and David Dix

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the South boundary of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah.

Daniel S. Macfarlane Moundman

David Dix Moundman

Subscribed and sworn to before me this 12th

day of May 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley

Notary Public

WE Daniel S. Macfarlane and Henry Houchen

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of the South boundary of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah.

Daniel S. Macfarlane Axman

Henry Houchen Axman

Subscribed and sworn to before me this 12th

day of May 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley

Notary Public

I, David Dix do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the South boundary of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah.

David Dix Flagman

Subscribed and sworn to before me this 12th

day of May 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley

Notary Public

South Boundary of T.42 S., R.14 W.

Chains.

Survey commenced May 22, 1899, and executed with a W. & L. E. Gurley Light Mountain Solar Transit No. 31, with Jones' Patent Double Latitude Arc No. 45, with reversible level bubble.

The horizontal limb is provided with two opposite verniers reading to single minutes of arc; the verniers of the declination arc read to thirty seconds of arc; and the verniers of the smaller and larger latitude arcs read to single minutes and to ten seconds of arc respectively.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the Surveyor General for Utah, April 28, 1899.

I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications, resulting from solar observations made during a.m. and p.m. hours, with a true meridian determined by observation on Polaris, I proceed as follows:

May 22: At the closing cor. of Tps. 42 and 43 S., bet. Rs. 13 and 14 W., approximate latitude $37^{\circ} 7' N.$, longitude $113^{\circ} 18' W.$, I set off $37^{\circ} 7' N.$ on the lat. arc; $20^{\circ} 31' N.$ on the decl. arc; and, at $4^h 56^m.5$, p.m., l.m.t., determine with the solar a true meridian; and mark a point thereof on a large flat stone firmly set in a mound of stones, 5.00 chs. N. of the cor.

May 22, 1899.

May 23: At $3^h 23^m$ a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual of Instructions, and mark a point on the line thus determined on a large flat stone set firmly in a mound of stones, 5.00 chs. N. of my station.

At $6^h 30^m$ a.m., l.m.t., I lay off the azimuth of Polaris, $1^{\circ} 33'$, to the west, and mark the True Meridian thus determined, by cutting a small groove in the stone set May 22, on which the true meridian falls 0.3 ins., east of the mark determined by the solar.

At $6^h 57^m$ a.m., l.m.t., I set off $37^{\circ} 7' N.$ on

South Boundary of T.42 S., R.14 W.-Continued.

Chains the lat.arc; $20^{\circ} 38'$ N.on the decl.arc;and mark a point in the true meridian determined with the solar,by a cross on the stone already set 5.00 chs.N. of my station;this mark falls 0.25 inc.east of the True Meridian established by the Polaris observation.

The solar apparatus by p.m.and a.m.observations defines positions for true meridians,respectively about $0^{\circ} 16''$ west and $0^{\circ} 13''$ east of the true meridian established by the Polaris observations;therefore,I conclude the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8^h a.m.,is N. $15^{\circ} 56'$ W.;the angle thus determined,reduced by the table,page 100,gives the mean mag.decl. $15^{\circ} 52'$ E.

I begin at the closing cor.of Tps.42 and 43 S., bet.Rs.13 and 14 W.,which is a red sandstone $36 \times 8 \times 5$ ins.,firmly set in a mound of stone ,and marked and witnessed as described by the Surveyor General.I remark this stone for cor.of Tps.42 and 43 S.,Rs.13 and 14 W.,with 6 notches on each edge,42 S.on N.E.,13 W. on S.E.,43 S.on S.W.,and 14 W.on N.W.faces;and raised a mound of stone,2 ft.base,I $1\frac{1}{2}$ ft.high,S.of cor. Pits impracticable.Solid sandstone surface prevented setting the corner stone deeper. I obliterate all marks pertaining to the closing Tp.cor.,and also destroy all traces of the old cor.to Tps.42 and 43 S. Rs.13 and 14 W.,which I find at 24.39 chs.,South of the new Tp.cor.

I lay off from the true meridian an angle of 90° from N.to W..

Thence I run

West,on a random line,along the S. bdy.of Tp.42 S.,R. 14 W.,setting temp. $1\frac{1}{4}$ sec.and sec.corners at intervals of 40.00 chs.;and,at 485.00 chs.,intersect the W.bndy.of the Tp.,at 6.63 chs.N. $0^{\circ} 30' W.$ of the cor.of Tps.42 and 43 S.,Rs.14 and 15 W.,which is a white sandstone $18 \times 6 \times 6$ ins.,firmly set in a mound of stones,and marked and witnessed as described by the Surveyor General. The falling exceeds the limits of 21 minutes of arc,as prescribed by the Manual,counting from S.E.

South Boundary of T.42 S., R.14 W.-Continued.

Chains.	<p>cor. of the Tp.; therefore, at the intersection with the W. l. bdy. of the Tp., at 6.63 chs. N. $0^{\circ} 30' W.$ of the old S.W. cor. of the Tp., I set a white sandstone $24 \times 10 \times 8$ ins., 18 ins. in the ground, for closing cor. of Tps. 42 and 43 S., R. 14 W., marked C.C. 14 W. and 6 grooves on E. face, 42 S. and 6 grooves on N. face, 43 S. and 6 grooves on S. face; dug pits $30 \times 24 \times 12$ ins., crosswise on each line N. and S., 4 ft., and E. of stone 8 ft. dist.; and raised a mound of earth, 5 ft. base, $2 \frac{1}{2}$ ft. high, E. of cor. I destroy the marks on the old cor. to Tps. 42 and 43 S., Rs. 14 and 15 W. that pertain to R. 14 W.</p> <p style="text-align: right;">May 23, 1899.</p>
	<p>I begin at the closing cor. of Tps. 42 and 43 S., bet. Rs. 14 and 15 W., which I established May 23, 1899. Thence I run</p> <p>East, on a true line bet. secs. 6 and 31.</p> <p>Over rolling gypsum foot hills descending to N.W.</p>
19.00	Foot of granite and sandstone ridge about 200 ft. above the Tp. cor., bears S. $45^{\circ} W.$ and N. $45^{\circ} E.$ to the Rio Virgin; ascend abruptly on N.W. slope.
36.80	Top of sharp ridge about 400 ft. above the foot, bears N. $40^{\circ} E.$ and S. $40^{\circ} W.$; thence descend abruptly on S.E. slope.
45.00	Set a gray granite stone $20 \times 12 \times 4$ ins., 15 ins. deep in a mound of stone, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raised a mound of stone, 2 ft. base, $1 \frac{1}{2}$ ft. high, N. of cor. Pits impracticable. Solid sandstone surface prevented setting the cor. stone deeper. This cor. is on the S.E. slope about 150 ft. below the top of ridge, on what is known as the Warner Range.
53.00	Foot of ridge about 150 ft. below the $\frac{1}{4}$ sec. cor., bears N. $40^{\circ} E.$ and S. $40^{\circ} W.$; thence ascend N.W. slope of volcanic reef and spur of main ridge which bears N.E. and S.W.
57.00	Top of reef about 30 ft. above the foot, bears N. $15^{\circ} E.$ and S. $15^{\circ} W.$; descend E. slope of reef.
69.75	Fort Pierce wash at foot of reef in Warner's canon, about 30 ft. below top of reef, 25 ft. wide and 10 ft. deep, drains N. $40^{\circ} E.$ to the Rio Virgin.
69.90	Old road to Washington and Ft. Pierce in bottom of

South Boundary of T.42 S., R.14 W.-Continued.

Chains	wash, bears N.40°E. and S.40°W.; thence ascend over rolling sandy foot hills sloping to N.W.
83.60	Top of sandridge about 75 ft. above Ft. Pierce wash, bears N.80°W. and S.80°E.; descend on E.E. slope of sandridge.
85.00	Bottom of hollow about 25 ft. below top of ridge, drains N.70°W. Set a red sandstone 15x10x6 ins., 10 ins., in the ground, for cor. of secs. 5, 6, 31 and 32, marked with 1 notch on the W. and 5 notches on the E. edges; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Land broken foot hills and ridges. Soil, gypsum, stony and sandy; 4th. and 2nd. rate. No timber. Mountainous land on 85.00 chs. Foot hills afford fair grazing when supplied with moisture.
	East, bet. secs. 5. and 32. Ascend gradually over broken foot hills, sloping N.W. and W.; in sandy soil; through dense sage and greasewood undergrowth.
19.00	Trail bears N.60°E., and joins main trail at about 1.50 chs., and S.60°W.
26.40	Main trail to Rio Virgin bears N.5°W. and S.5°E.
40.00	Set a red sand stone 24x14x7 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18 x12 ins., E. and W. of stone 3 ft. dist.; and raised a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, W. of cor. This cor. is on W. slope of rolling sandy foot hills about 150 ft. above the sec. cor.
41.00	Leave dense undergrowth; enter scattering greasewood and sage bears N.15°E. and S.15°W.
45.56	Foot of red sandstone mountain, about 75 ft. above the 1/4 sec. cor., bears N.15°E. and S.15°W.; thence ascend rapidly on W. slope.
64.60	Foot of red sandstone ledges on W. slope, almost perpendicular, about 200 ft. above foot of ^{mountain} , bears N. 15° E. and S. 15° W.; thence ascend abruptly over ledges.

(5)

South Boundary of T.42 S., R.14 W.-Continued.

Chains.	
65.00	Top of ledges about 100 ft. above the foot, bears N. 15° E. and S. 15° W.; thence ascend abruptly about 75 ft. over broken ledges, to
67.45	Top of broken ledges bears N. 15° E. and S. 15° W.; thence over top of sand stone mountain, gradually ascending.
79.00	Top of ascent about 100 ft. above the broken ledges, bears N. 10° E. and S. 10° W.; thence descend on E. slope.
80.00	Set a red sandstone 24x12x7 ins., 18 ins., in the ground, for cor. of secs. 4, 5, 32 and 33; dug pits 18x18x12 ins. in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor. This cor. is about 10 ft. below top of ascent on sand mountain. Land, mountainous, and broken. Soil, sandy, stony and gravelly; 2nd. and 4th. rate. Dense sage and greasewood undergrowth 41.00 chs. Mountainous land on 80.00 chs. No timber. Good grazing on foot hills and top of mountain when supplied with moisture. Note: This point overlooks the valley of the Rio Virgin to the N.N.W. and W. The town of Washington in the distance bears N. 45° 10' W.; the town of Middleton bears N. 62° 40' W.; St. George City bears N. 77° 45' W. and the L.D.S. Temple spire in St. George City bears N. 80° 55' W. May 24: At this cor. I set off 20° 50.5' N. on the decl arc; and at 11 ^h 56 ^m 5 a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 7' N. - the true latitude.

East, bet. secs. 4 and 33.

Descend gradually over top of sand mountain sloping N.E.; through dense sage, greasewood and large cactus undergrowth; in sandy gravelly soil.

4.00 Enter rich sandy-loamy soil bears N.E. and S.W.

40.00 Set a red sandstone 36x10x6 ins., 27 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18x12 ins., E. and W. of stone 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor. This cor. is about 150 ft. below the sec. cor.

77.00 Top of hollow about 125 ft. below the 1/4 sec. cor., bears N. 30° E. and S. 30° W.; thence descend on E. slope.

(6)

South Boundary of T.42 S., R.14 W.-Continued.

Chains.	of hollow.
80.00	Set a red sandstone 30x20x6 ins., 23 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, marked with 3 notches on E. and W. edges; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. This cor. is about 25 ft. below the top of hollow. Land, nearly level except descent of hollow. Soil, sandy and gravelly, and rich sandy loam; 3rd. and 1st. rates. Dense sage, greasewood and cactus undergrowth 80.00 chs. Good grazing when well supplied with moisture.
	May 24: At 3 ^h p.m., 1.m.t., I set off 37° 7' N. on the lat. arc; 20° 52' N. on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 3, 4, 33 and 34. Thence I run East, bet. secs. 3 and 34. Descend on E. slope of hollow; in sandy-loamy soil; through dense sage, greasewood and cactus undergrowth
.30	Bottom of hollow about 10 ft. below the sec. cor., drains N. 5.00 chs.; thence N. 30° E.; thence ascend W. slope of hollow.
2.00	Top of hollow about 40 ft. above the bottom bears N. 5.00 chs.; thence N. 30° E.; descend gradually over flat top of sand mountain.
34.00	Top of hollow about 75 ft. below the sec. cor. bears N. 10° E. and S. 10° W.; descend gradually into hollow.
37.00	Leave dense undergrowth and enter almost barren sand drifts bears N. 10° E. and S. 10° W.;
39.50	Bottom of hollow about 25 ft. below the top drains N. 10° E.; thence ascend W. slope of hollow.
40.00	Set a red sandstone 20x12x4 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18x12 ins., E. and W. of stone 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor. This cor. about 10 ft. above bottom of hollow.
44.00	Top of hollow about 40 ft. above the 1/4 sec. cor., bears N. and S.; thence ascend gradually.
51.00	Foot of sand-drift about 25 ft. above the top of hol-

South Boundary of T.42 S., R.14 W.-Continued.

Chains. low bears N.W. and S.E.

54.00 Top of sand-drift about 25 ft. above the foot, bears N.W. and S.E.; descend.

55.00 Foot of sand-drift about 25 ft. below the top bears N.W. and S.E.; thence ascend gradually over sandy soil.

80.00 Set a red sandstone 20x16x7 ins., 15 ins. in the ground, for cor. of secs. 2, 3, 34 and 35, marked with 2 notches on the E. and 4 notches on the W. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable in sand-drifts.

Land, broken & Mountainous.

Soil, sandy loam, sand-drifts and sandridges; 1st. and 4th. rate. No timber.

Dense sage, greasewood and cactus undergrowth 37.00 chs.

Mountainous land on 80.00 chs.

W. 1/2 mi. good grazing when supplied with moisture.

May 24, 1899.

May 25: At 8^h 56^m 7^s a.m., l.m.t., I set off 37° 7' N. on the lat. arc; 21° 0' 5" N. on the decl. arc; and determine a true meridian with the solar, at the cor. of secs. 2, 3, 34 and 35.

Thence I run

East, bet. secs. 2 and 35.

Ascend gradually over sand-drifts.

3.00 Foot of sandridge about 15 ft. above the sec. cor., bears N. 10° E. and S. 10° W. Enter stony ground and dense sage, greasewood, service-berry and cactus undergrowth which bear N. 10° E. and S. 10° W.; ascend W. slope of sand ridge.

13.00 Top of sand ridge about 100 ft. above the foot bears N. 10° E. and S. 10° W.; thence descend gradually over flat top of sand-stone mountain.

36.00 Top of sandstone reef on W. side of hollow, about 50 ft. below top of sand-ridge, bears N. 10° E. and S. 10° W.; thence descend into hollow.

37.50 Bottom of hollow at foot of sand stone reef about 25 feet below the top, drains N. 10° E.; ascend.

40.00 Set a volcanic stone 18x12x7 ins., 12 ins., in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and

South Boundary of T.42 S., R.14 W.-Continued.

Chains	raised a mound of stone 2 ft. base, 1 1/2 ft. high, N. of corner. Pits impracticable-sand stone surface. This cor. is on N.W. slope of sand ridge which bears N.E. and S.W., about 20 ft. above the bottom of hollow.
45.00	Top of ascent about 40 ft. above the 1/4 sec. cor., bears N. 40° E. and S. 40° W.; thence descend over sand-stone reefs.
56.00	Foot of sand stone reefs about 100 ft. below the top bears N. 40° E. and S. 40° W.; thence over almost level top of sand hills, gently rolling.
64.00	Begin ascent of W. slope of sand ridge bears N. 40° E. and S. 40° W. A small grove of cottonwoods bears S. about 10.00 chs.
69.00	W. foot of sand-stone boulder, about 80 ft. N. and S. by 66 ft. E. and W., and 40 ft. high.
70.00	E. foot of sand stone boulder at top of ascent, about 100 ft. above foot of ascent, bears N. and S. Begin decent over sand-stone reefs.
74.00	Foot of descent about 100 ft. below the top, bears N. 40° E. and S. 40° W.; thence over level top of sandridge.
80.00	Set a red sandstone 28x14x5 ins., 21 ins. deep in a mound of stone, for cor. of secs 1, 2, 35 and 36, marked with 5 notches on the W. and 1 notch on the E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Hard sand stone surface prevented setting the cor. stone deeper. Land mountainous, broken sand hills and sandridges. Soil, sand-drifts, sandy, gravelly and stony; 3rd. and 4th. rate. No timber. Dense sage, greasewood, service-berry and cactus under growth 77.00 chs. Mountainous land on 80.00 chs.
	East, bet. secs. 1 and 36. Ascend gradually over flat top of sand ridge; through dense sage, greasewood, serviceberry and cactus undergrowth.
8.40	Top of ascent about 40 ft. above the sec. cor., bears N. 60° E. and S. 60° W.; thence descend rapidly over sand-stone reefs.
21.50	Begin more gradual descent over sand stone reefs.

South Boundary of T.42 S., R.14 W.-Continued.

Chains

- 30.00 Foot of descent about 150 ft. below the top bears N. 60° E. and S. 60° W.; thence ascend N.W. slope of sandridges.
- 33.00 Top of sand-stone reefs about 70 ft. above the foot of descent, bears N. 60° E. and S. 60° W.; thence descend over sandstone reefs on S.E. slope.
- 38.00 Bottom of hollow at foot of sand stone reefs about 40 ft. below the top, drains N. 60° E.; thence ascend.
- 40.00 Set a red sandstone 24x12x7 ins., 18 ins., in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
- This cor. is on N.W. slope about 20 ft. above the bottom of hollow.
- 44.00 Top of sandstone reefs about 40 ft. above the 1/4 sec cor., bears N. 60° E. and S. 60° W.; thence descend over sandstone reefs sloping to N.E.
- 57.00 Foot of descent about 100 ft. below the top bears N. 60° E. and S. 60° W.; thence over top of sandridge almost level.
- 65.00 Descend on S.E. slope of sandridge. Leave dense undergrowth, and enter medium dense undergrowth bears N. and S.
- 74.00 Bottom of hollow at foot of sandridge about 110 ft. below the top, drains N. 70° E.; thence ascend N.W. slope of sandridge about 125 ft. to
- 80.00 The cor. of Tps. 42 and 43 S., Rs. 13 and 14 W. Land, broken ridges, reefs and hollows. Soil, sandy and stony; 3rd. and 4th. rate. No timber. Dense sage, greasewood, service berry and cactus undergrowth 65.00 chs. Mountainous land on 80.00 chs.
- May 25: At this Tp. cor. I set off 21° 1' N. on the decl. arc; and at 2^h 56^m 7 l.m.t., observe the sun on the meridian; the resulting lat. is: 37° 7' N.
- May 25: At the meridian established May 23, at 2^h 56^m 7 p.m., l.m.t., I set off 37° 7' N. on the lat. arc; 21° 3' N. on the decl. arc; and test the adjustments of my solar, finding it gives the same meridian as before and adjustments correct.

May 25, 1899.

South boundary of T.42 S., R.14 W.,-continued.

GENERAL DESCRIPTION.

For General Description see subdivision notes of this Township.

Mayhew H. Dalley
U. S. Deputy Surveyor.

Latitudes Departures and Closing Errors.

Line	Designated	True Bearing	Dist	Latitudes		Departures	
				N Chs	S Chs	E Chs	W Chs
S bdy T 42 S R 14 W		West	485.00				485.00
E bdy T 42 S R 15 W		N 0° 30' W	73.33	73.33			.70
Port of E bdy Sec 36		N 0° 24' W	80.58	80.58			.56
E bdy Sec 25		N 0° 40' W	80.50	80.50			.99
E " " 24		N 0° 20' W	80.06	80.06			.46
E " " 13		N 0° 12' W	80.46	80.46			.28
E " " 12		North	39.69	39.69			
E " " 1		N 9° 14' W	40.59	40.00			6.50
S bdy T 42 S R 14 W		S 89° 55' E	81.70		.12	81.70	
S " Sec 31		S 89° 55' E	81.70		.12	81.70	
S " Sec 32		N 89° 40' E	82.40	.48		82.40	
S " Sec 33		S 89° 57' E	82.70		.07	82.70	
S " Sec 34		S 89° 57' E	85.00		.07	85.00	
S " Sec 35		S 89° 57' E	80.20		.07	80.20	
S " Sec 36		S 0° 10' W	79.82		79.82		.22
E bdy T 42 S R 14 W		S 0° 07' W	400.00		400.00		.82
E " Sec 6							
E bdy T 42 S R 14 W						.55	
Convergence				475.10	475.27	499.25	495.48
Error in Lot					475.10		499.25
					0.17	Error in Dep 1.23	

Mayhew H. Dalley
U. S. Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Mayhew H. Dalley
_____, United States Deputy Surveyor, to assist in running, measuring, and
marking the lines and corners described in the foregoing field notes of the survey of the South
boundary of Township No. 42 South, Range No. 14 West, of the Salt Lake
Base and Meridian, in the State of Utah,
_____ giving the respective capacities in which they acted:
Albert C. Dalley, _____, Chainman.
Heber Dalley, _____, Chainman.
Daniel S. Macfarlane, _____, Moundman.
David Dix, _____, Moundman.
Daniel S. Macfarlane, _____, Asman.
Henry Houchen, _____, Asman.
David Dix, _____, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Mayhew H. Dalley
_____, United States Deputy Surveyor, in surveying all
the parts or portions of the South Boundary of Township No. 42 South, Range
No. 14 West,
_____ of the Salt
lake Base and _____ meridian, in the State of Utah _____, which are represented
in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
other monuments established, according to the instructions furnished by the United States Surveyor
General for the State of Utah.

Albert C. Dalley _____, Chainman.
Heber Dalley _____, Chainman.
Daniel S. Macfarlane _____, Moundman.
David Dix _____, Moundman.
Daniel S. Macfarlane _____, Asman.
Henry Houchen _____, Asman.
David Dix _____, Flagman.

described and sworn to before me this 21st.
day of July, 1899.



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public, Iron County, Utah.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dalley, United States Deputy Surveyor,
 solemnly swear that, in pursuance of a contract received from Jacob B. Blair
 United States Surveyor General for the State of Utah, bearing date
23rd day of January, 1899, I have well, faithfully, and truly, in my
 proper person, and in strict conformity with the instructions furnished by the United States Survey
 General for the State of Utah, the Manual of Surveying Instructions, and the laws of
 United States, surveyed all those parts or portions of the South Boundary of Town-
ship NO. 42 South, Range No. 14 West,

of the Salt Lake
Base and meridian, in the State of Utah, which are represented in the
 foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly
 swear that all the corners of said survey have been established and perpetuated in strict accordance with
 the Manual of Surveying Instructions, and the special written instructions of the United States Survey
 General for the State of Utah, and in the specific manner described in the field notes, and that
 the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer
 the penalty of perjury under the provisions of an Act of Congress approved August 8, 1840.

Mayhew H. Dalley
 United States Deputy Surveyor

Subscribed by said Mayhew H. Dalley, and sworn to before me
 this 31st day of May, 1901, A.D. 1900.

000000
 000000
 000000

Edward Henderson
 U.S. Surveyor General for Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Validated by Utah April 17, 1902

The foregoing field notes of the survey of the South Boundary of
Township No. 42 South, Range No. 14 West of the P.M.
Salt Lake & Meridian, Utah

examined by Mayhew H. Dalley
 under his contract No. 224, dated January 23, 1899, having been
 critically examined, and the necessary corrections and explanations made, the said field notes, and the
 surveys they describe, are hereby approved.

Edward Henderson
 United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in
 has been correctly copied from the original notes on file in this office.

United States Surveyor General

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FIELD NOTES

re retracement
OF THE SURVEY, OF THE

WEST, NORTH AND EAST BOUNDARIES

OF

TOWNSHIP NO. 42 SOUTH, RANGE NO. 14 WEST

Of the Salt Lake Base and Meridian,
in the State of Utah.

AS SURVEYED BY

Mayhew H. Dalley, United States Deputy Surveyor,

by his Contract No. 224, dated January 23, 1899.

by commenced May 26, 1899

by completed May 27, 1899

W. H. & B. M. Ch. 100 -
Retracement from 10 06-41 ✓

Resurvey N. & W. 1/4 Sec 2-60-63 & kept
23-27

NAMES AND DUTIES OF ASSISTANTS.

Albert C. Dalley, Chainman.

Heber Dalley, Chainman.

Daniel S. Macfarlane, Moundman.

David Dix Moundman.

Daniel S. Macfarlane, Axman.

Henry Houchen, Axman.

David Dix, Flagman.

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PRELIMINARY OATHS OF ASSISTANTS.

WE, Albert C. Dalley and Heber G. Dalley,

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey ^{relocament of the} West, North and East Boundaries of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah.

Albert C. Dalley, Chainman
Heber Dalley, Chainman

Subscribed and sworn to before me this 12th day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public

WE, Daniel S. Macfarlane and David Dix

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey ^{relocament of the} West, North and East Boundaries of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah.

Daniel S. Macfarlane, Moundman
David Dix, Moundman

Subscribed and sworn to before me this 12th day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public

WE, Daniel S. Macfarlane and Henry Houchens

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey ^{relocament of the} West, North and East Boundaries of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah.

Daniel S. Macfarlane, Axman
Henry Houchens, Axman

Subscribed and sworn to before me this 12th day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public

I, David Dix, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey ^{relocament of the} West, North and East Boundaries of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah.

David Dix, Flagman

Subscribed and sworn to before me this 12th day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public

Retracement of W.bdy.of T.42 S.,R.14 W.

Chains. Retracements commenced May 26,1899,and executed with a W.and L.E.Gurley Light Mountain Solar Transit ,for description of which see notes of Survey of S.bdy.of Tp.42 S.,R.14 W.,Book A.

For a complete test of solar apparatus see notes of Survey of S.bdy.of T.42 S.,R.14 W.,Book A.

By surveying the S.bdy.of this Tp.as instructed, I find that the exteriors of the Tp.will not close; therefore,preliminary to commencing the subdivisions of the unsubdivided portion of the Tp.,I retrace the old exteriors as follows:

May 26,1899:At the cor.of Tps.42 and 43 S.,R.15 W.,as re-marked by me and described in the Survey of the S.bdy.of T.42 S.,R.14 W., I set off $37^{\circ} 7'$ N.on the lat.arc; $21^{\circ} 11'$ N.on the decl.arc;and at 8^h a. m.,l.m.t.,determine a true meridian with the solar. Thence I run

N: bet.secs.31 and 36

Ascend over broken clay and gypsum foot hills;in stony and gravelly soil.

- .50 Top of ascent about 10 ft.above the Tp.cor bears S.E.and N.W.;thence descend
- 6.63 The closing cor.of Tps.42 and 43 S.,R.14 W.
- 11.35 Wash 15 ft.wide and 4 ft.deep drains W.and heads East about 30.00 chs.
- 21.00 Hollow about 25 ft.wide and 10 ft.deep drains N. 75° W.
- 34.00 Hollow or wash about 20 ft.wide and 10 ft.deep at foot of descent,drains S. 70° W. and heads N. 50° E. about 60.00 chs. About 75 ft.below the Tp.cor. Thence ascend S.slope of high mountain.
- 38.50 Trail bears N.E.and S.W.
- 40.03 Fall 41 lks.E.of the old $1/4$ sec.cor.,which is a white sandstone 6x10x6 ins.above ground,marked and witnessed as described by the Surveyor general.
- 79.96 Fall 70 lks.E.of the old cor.of secs.25,30,31 and 36 which is a white sand stone 6x8x4 ins.above ground, marked and witnessed as described by the surveyor.

Retracement of W.bdy. of T.42 S., R.14 W.-Continued.

Chains: General.

The course of this line is therefore N. $0^{\circ} 30'$ W.
This cor. is on the S. slope of high mountain about
200 ft. above hollow or wash at foot of mountain.
Land broken, foot hills and mountainous.
Soil, clay and gypsum; gravelly and stony; 2nd. and 3rd.
rate.
Scattering greasewood and iron wood on last 45.00
chs.
Mountainous land on 79.96 chs.

From cor. of secs. 25, 30, 31 and 36, I continue re-
tracement of W. bdy. of Tp. as follows:

N. on E. bdy. of sec. 25.

Ascend S. slope of high mountain; in gravelly stony
ground; through medium dense greasewood and iron wood
undergrowth.

7.00 Top of ascent about 150 ft. above the sec. cor. bears
N.W. and S.E.; thence descend into deep ravine.

10.75 Bottom of ravine about 75 ft. below the top, drains
S. 30° E. about 40.00 chs.; thence S.W.; heads N. 30° W.
about 10.00 chs.; thence ascend rapidly on S.W. slope
of high mountain.

27.50 Top of mountain about 275 ft. above the sec. cor. bears
N. 40° E. and S. 40° W.; thence descend rapidly on N.W.
slope.

38.93 Fall 34 lks. E. of the old $1/4$ sec. cor., which is a
white limestone $5 \times 10 \times 6$ ins. above ground, marked and
witnessed as described by the Surveyor General.
This cor. is about 200 ft. below the top of mountain on
N.W. slope.

67.00 Bottom of ravine at foot of mountain about 100 ft.
below the $1/4$ sec. cor., heads S. 45° E. about 20.00 chs.
and drains N. 5.00 chs., thence N. 25° W.; thence over
broken foot hills.

75.00 Enter sandy soil bears N.E. and S.W.; leave stony and
gravelly soil.

80.58 Fall 56 lks. E. of the old cor. of secs. 19, 24, 25 and 30,

Retracement of W.bdy. of T.42 S., R.14 W.-Continued.

Chains.	which is a quartz stone 4x10x5 ins. above ground, marked and witnessed as described by the Surveyor General. Cor. about 100 ft. below the 1/4 sec. cor. The course of this line is therefore N. 0° 24' W. Land mountainous and broken foot hills. Soil gravelly, stony and sandy; 4th. and 2nd. rate. Mountainous land on 80.58 chs.
	From the cor. of secs. 19, 24, 25 and 30, I run N. on retracement line on E. bdy. of sec. 24.
40.00	I find no trace of the 1/4 sec. cor.
80.50	Fall 94 lks. E. of the old cor. of secs. 13, 18, 19 and 24, which is a white sand stone 6x12x6 ins. above ground, marked and witnessed as described by the Surveyor General. Therefore the course of this line is N. 0° 40' W. I return to the cor. of secs. 19, 24, 25 and 30, and run N. 0° 40' W. on a true line on E. bdy. of sec. 24. Descend over broken sandy foot hills; in sandy soil; through scattering sage, greasewood and iron wood undergrowth.
15.00	Enter sandy, gravelly and stony soil, bears N. W. and S. E.; leave sandy soil.
19.00	Enter clay and gypsum soil, gravelly and stony, bears N. W. and S. E.; leave sandy soil.
20.00	Road bears N. 80° W. and S. 80° E.
30.60	Trail bears S. 40° W. and N. 40° E.
30.70	Road bears S. 45° W. and N. 25° E.; in hollow at foot of foot hills, about 100 ft. below the sec. cor. drains N. E. to Washington canal.; ascend gradually.
36.00	Top of ascent about 25 ft. above the road bears N. E. and S. W.; thence descend on E. slope of rocky knoll, about 150 ft. high.
38.95	Old road at N. E. foot of knoll, bears S. 80° W. and N. 80° E.
40.25	Set a gray limestone 30x12x4 ins., 23 ins. in the ground for re-established 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone 3 ft. dist.;

Retracement of W.bdy.of Tp.42 S., R.14 W.-Continued.

Chains	and raised a mound of earth 3 1/2 ft.base, 1 1/2 ft. high, W.of cor.
40.93	S.bank of Washington canal about 8 ft.deep drains S.80° W.about 5.00 chs.; thence N.W.; water in canal about 6 ft.deep.
41.20	N.bank of canal.; thence descend gradually over sandy and gravelly soil, over bench on S.side of river bottom.
47.55	Set a red sandstone 36x16x6 ins., 27 ins.in the ground, for witness corner of meander corner of fractional secs.19 and 24, marked W.C. and M.C.on N., T.42 S.on S., R.14 W., S.19, and E., and R.15 W., S.24 on W.faces; dug pit 36x36x12 ins., 8 ft.S.of stone; and raised a mound of earth and stone, 4 ft.base, 2 ft.high, S.of cor. From which cor., a cottonwood 9 ins., diameter, N.63° W. 8 1/2 lks.dist.; marked W.C., T.42 S., R.15 W., S.24, M.C., B.T. A cottonwood 14 ins.diam., bears N.49 1/2° E., 59 1/2 lks.dist.; marked W.C., T.42 S., R.14 W., S.19, M.C., B.T.
47.65	Row of cotton wood trees bears N.E.and S.W.
48.00	Enter river bottom at foot of bench, about 200 ft. below the sec.cor., bears N.E.and S.W.; leave sandy and gravelly soil; enter loamy soil and dense willow undergrowth.
57.25	Road from Washington to Virgin City by way of Berry Spring bears N.80° W.and S.80° E.
58.82	The point for Meander cor.of fractional secs.19 and 24 on S.bank of the Rio Virgin; leave dense willows. Corner falls on changeable bank and cannot be set.
59.00	S.side of water in Rio Virgin about 3.00 chs.wide, shallow water, rapid current, sandy bottom, runs S.W.
64.00	Set a yellow sandstone 24x12x8 ins., 18 ins.in the ground, for meander cor.of fractional secs.19 and 24 on N.bank of Rio Virgin, marked M.C.on S., T.42 S.on N., R.14 W.and S.19 on E., R.15 W., and S.24 on W.faces; dug a pit 36x36x12 ins., 8 ft.N. of stone; and raised a mound of earth, 4 ft.base, 2 ft. high, N.of cor.
64.79	Foot of nearly perpendicular ledges on N.side of river bottom, about 120 ft.high, bears N.70° E.and S. 70° W.

Retracement of W.bdy.of T.42 S.,R.14 W.-Continued.

Chains.

66.50

Top of ledges bears S.80° W.and N.80° E.;thence descend over top of high mountain range.

80.50

The cor.of secs.13,18,19 and 24.

This cor.is about 75 ft.below the top of mountain.

Land broken foot hills,nearly level in river bottom, and mountainous..

Soil,sandy,gravelly and stony and loam;2nd.,4th., and 1st.rate.

Dense willow undergrowth on 10.82 chs.

Mountainous land on 46.41 chs.

May 26,1899:At this cor.I set off 210° 12' N.on the decl.arc;and,at 11^h 57' a.m.,l.m.t.,observe the sun on on the meridian;the resulting lat.is 37° 00' N.

From the cor.of secs.13,18,19 and 24 ,I run N. on retracement line on E.bdy.of sec.13.

Descend over top of high mountain range;in gravelly and stony ground;through scattering greasewood and iron wood undergrowth.

15.00

S.side of a deep ravine about 150 ft.deep and about 5.00 chs.wide,drains,S.70° W.to Rio Virgin.

20.00

N.side of ravine .

40.01

Fall 22 lks.E.of the old 1/4 sec.cor,which is a black volcanic stone 4x10x8 ins.above ground,marked and witnessed as described by the Surveyor General.

53.56

Dug way road from Salt Lake City to Washington and St.George,bears N.70° E.and S.70° W.

54.75

Old dug way road bears N.E.and S.W.

56.60

Wash in hollow at foot of volcanic ridge about 250 ft.below the sec.cor.,about 40 ft.wide and 6 ft. deep,drains S.W.;thence ascend in sandy gravelly soil N.side of hollow.

60.00

Top of bench on N.side of hollow,about 50 ft.above ravine,bears N.E.and S.W.;thence over nearly level sandy bench.

67.50

Telegraph line bears N.E.and S.W.

80.06

Fall 46 lks.E.of the old cor.of secs.7,12,13 and 18,

Retracement of W.bdy.of T.42 S.,R.14 W.-Continued..

Chains, which is a white sandstone 5x10x6 ins. above ground, marked and witnessed as described by the Surveyor General.

The course of this line is therefor N.0° 20' W.

Land mountainous and broken.

Soil, sandy, gravelly and stony; 2nd. and 4th. rate.

Mountainous land on 56.60 chs..

From the cor. of secs. 7, 12, 13 and 18, I run

N. on retracement line on E. bdy. of sec. 12.

Ascend gradually over sandy and gravelly bench; in scattering sage, greasewood and iron wood undergrowth.

40.21 Fall 14 links E. of the old 1/4 sec. cor., which is a broken sandstone with 1/4 mark visible. I re-establish this 1/4 sec. cor. at the same point as follows: Set a volcanic or lava stone 17x6x5 ins., 12 ins. in the ground, marked 1/4 on W. face; dug pits 18x16x12 ins. N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

41.50 Top of ascent about 100 ft. above the sec. cor., bears N.W. and S.E.; descend into hollow.

45.25 Ravine in bottom of hollow about 25 ft. below the top, 6 ft. wide and 5 ft. deep, drains S.E. about 5.00 chs.; and joins main ravine.; thence ascend; leave sandy soil and enter clay and gypsum; continue in gravelly soil.

51.00 A small spring bears E. about 50 lks. Enter low limestone reefs and broken ridges bears N.E. and S.W.. Leave gypsum soil.

80.46 Fall 28 lks. E. of the old cor. of secs. 1, 6, 7 and 12, which is a white sandstone 36x20x3 ins., 27 ins. in the ground, marked and witnessed as described by the Surveyor General.

The course of this line is therefore N.0° 12' W.

Land mountainous and broken ridges.

Soil, sandy, clay and gypsum and gravelly and stony; 2nd. and 4th. rate.

Mountainous land on 80.46 chs.

Retracement of W.bdy. of T.42 S., R.14 W.-Continued.

Chains

Knowing that the N.W.cor. of the Tp. is other than indicated by the original field notes and that the topography bet. the cors. on the W.bdy. of sec. 6 will be changed, I begin at the cor. of secs. 1, 6, 7 and 12 and run N., on a random line bet. secs 1 and 6

39.69 Intersect old I/4 sec. cor., which is a black lava stone 4x7x7 ins., above ground, marked and witnessed as described by the Surveyor General.

79.69 Intersect the N.bdy. of the Tp. 6.50 chs. E. of the old cor. of Tps. 41 and 42 S., Rs. 14 and 15 W., which is a black lava stone 20x12x10 ins, in a mound of stone, marked and witnessed as described by the Surveyor General.

Thence from the old Tp. cor., I run
S. $90^{\circ} 14'$ E. on retracement line bet. secs. 1 and 6.
Gradually descend over volcanic ridge; in stony and gravelly soil; through scattering greasewood and iron wood undergrowth.

5.00 N. side of ravine about 65 ft. wide and 30 ft. deep, heads N. 30° W. about 10.00 chs., drains S. 30° E.

5.66 S. side of ravine.

18.00 Top of ascent, about 75 ft. above the Tp. cor., bears S. 20° E. and N. 20° W.; descend gradually over flat top of high sandstone mountain.

30.65 Trail bears S. 30° E. and N. 30° W.

33.25 Trail bears S. 30° E. and N. 30° W.

35.85 Trail bears S. 30° E. and N. 30° W.

40.54 Intersect the I/4 sec. cor., already described.

Thence I run

South

Over top of high mountain; gradually ascend.

Continue in greasewood and iron wood undergrowth.

24.60 Top of ascent about 125 ft. above the Tp. cor., bears N. 50° E. and S. 50° W.; thence descend gradually.

27.70 Top of ledges of sandstone mountain about 40 ft. below where descent begins, bears N. 50° E. and S. 50° W.; thence descend abruptly over S.E. slope of mountain.

31.70 Foot of mountain about 150 ft. below the top, bears

Retracement of W.bdy. of T.42 S., R.14 W.-Continued.

Chains N.E. and S.W.; thence descend more gradually over broken foot hills.

34.30 Road bears N.E. and S.W.

39.69 The cor of secs. 1, 6, 7 and 12.

Land mountainous and broken.

Soil, sandy, gravelly and stony; 3rd. and 4th. rate.

Mountainous land on 80.23 chs.

May 26, 1899.

GENERAL DESCRIPTION.

For General Description see Subdivision notes of this Township.

Matthew H. Dalley
U.S. Deputy Surveyor

Retracement of N.bdy.of T.42 S.,R.14 W.

Chains. May 27, 1899: At the cor. of Tps. 41 and 42 S., Rs. 14 and 15 W., heretofore described, I set off $37^{\circ} 12'$ N. on the lat. arc; $21^{\circ} 21'$ N. on the decl. arc; and, at 7^h a.m., l.m.t., determine a true meridian with the solar.

Thence I run

E. on retracement line on the N.bdy. of the Tp., and at 40.00, 80.00, and 120.00 chs., find no trace of the $1/4$ sec. and sec. corners; and at 163.40 chs., fall 24 lks. N. of the old cor. of secs. 4, 5, 32 and 33, which is a gray sand stone $12 \times 10 \times 5$ ins. above ground, marked and witnessed as described by the Surveyor General.

Thence I return to the old cor. of Tps. 41 and 42 S., Rs. 14 and 15 W., and re-establish the N.bdy. of secs. 5 and 6, as follows:

May 27, 1899: At this cor. I set off $37^{\circ} 12'$ N. on the lat. arc; $21^{\circ} 21'$ N. on the decl. arc; and, at 10^h a.m., l.m.t., determine a true meridian with the solar.

Thence I run $S. 89^{\circ} 55'$ E. on a true line bet. secs. 6 and 31.

Ascend gradually over volcanic ridges; in stony ground; through scattering greasewood, sage and iron wood undergrowth; also cactus undergrowth.

- 2.64 Top of ledge of volcanic cinder, about 75 ft. high, bears N. and S.; descend abruptly.
- 3.00 Foot of ledges bears NE. and S.W. A chasm about 8 ft. wide and 50 ft. deep drains $S. 40^{\circ}$ E.; descend over S.E. slope of sand stone ridges.
- 19.50 Hollow about 50 ft. wide and 10 ft. deep, heads $N. 60^{\circ}$ E. about 20.00 chs., and drains $S. 50^{\circ}$ W.; ascend on N.W. slope of sand ridge.
- 21.50 Trail bears $N. 60^{\circ}$ E. and $S. 60^{\circ}$ W.
- 33.00 Top of ascent about 75 ft. above the foot of ascent, bears $N. 20^{\circ}$ E. and $S. 10^{\circ}$ W.; descend.
- 37.00 Ravine at foot of descent, about 10 ft. wide and 6 ft. deep, drains S.; ascend gradually on S.W. slope.
- 40.85 Set a red sandstone $18 \times 15 \times 4$ ins., 12 ins. in the ground, for re-established $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone 2 ft. base, $1 1/2$ ft. high, N. of cor. Pits impracticable.

Retracement of N.bdy.of T.42 S.,R.14 W.-Continued.

Chains.	
52.60	Ravine about 10 ft.wide and 6 ft.deep,drains S.40° W.
53.00	Trail bears S.35° W.and N.35° E.
57.80	Re-cross ravine,about 10 ft.wide and 6 ft.deep, drains N.80° W.
64.00	Top of sandridge about 100 ft.above the 1/4 sec.cor., bears N.and S.;descend on N.E.slope ;through dense sage undergrowth and scattering oose;still in scat- tering greasewood and iron wood undergrowth and cactus.
81.70	Set a red sandstone 30x8x4 ins.,23 ins.in a mound of stone,for re-established cor.of secs.5,6,31 and 32, marked with 1 notch on W.and 5 notches on E.edges; and raised a mound of stone 2 ft.base,1 1/2 ft.high, W.of cor. This cor.is on E.slope of sandridge,about 100 ft. about 100 ft.below the top. Land mountainous and broken. Soil,stonny,gravelly and sandy;4th.and 3rd.rate. Dense undergrowth on 17.70 chs. Mountainous land on 81.70 chs.
	From the re-established cor.of secs.5,6,31 and 32, I run S.89° 55' E.on a true line bet.secs.5 and 32. Descend on E.slope of sandridge;in sandy and stone ground;through scattering sage,oose and cactus un- dergrowth.
2.80	Ravine at bottom of sandridge,abou 50 ft.below the sec.cor.,about 10 ft.wide and 5 ft.deep,drains S. 15° E.;ascend.
5.80	Foot of sandstone bluff 25 ft.above ravine,bears S.40° W. 1.25 ch.and N.40° E. about 2.00 chs.
6.40	Top of bluff about 25 ft.above the foot bears N.40° E.and S.40° W.;descend.
10.30	Bottom of hollow at foot of sandstone bluff,about 40 ft.below the top,drains S.35° W. Road from Washington bears S.20° W.and N.

Retracement of N.bdy. of Tp. 42 S., R. 14 W. - Continued.

Chains.	Thence ascend over broken sandridges.
22.80	Top of ascent about 100 ft. above the sec. cor., bears N.E. and S.W.; thence over nearly flat top of sandstone mountain.
34.65	Cut off road from Washington to Leeds, bears S.W. and N.E.
40.85	Set a red sandstone 24x10x5 ins., 18 ins. in the ground for re-established 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
41.20	Commence steep descent over broken sandstone ledges, which bear N.E. and S.W.
46.30	Foot of sand ridge about 75 ft. below top of ledges, bears N.E. and S.W.; thence over broken sandridges.
53.30	Road bears N. and S. 10° E.
55.95	Trail bears S. 25° E. and N. 25° W.
57.30	Ravine about 50 ft. wide and 40 ft. deep, drains S.
62.80	Hollow about 100 ft. wide and about 40 ft. deep, drains S. 30° E.
81.70	The cor. of secs. 4, 5, 32 and 33. Land mountainous and broken ridges. Soil sandy and stony; 4th. rate. Mountainous land on 81.70 chs.
<p>From the cor. of secs. 4, 5, 32 and 33, I continue re-tracement of N.bdy. of Tp. as follows:</p> <p>E. bet. secs. 4 and 33.</p> <p>Ascend over broken foot hills and rocky ridges; in clay, gravelly and stony ground; through scattering sage, iron wood and cactus undergrowth.</p>	
9.00	Wash 12 ft. wide and 4 ft. deep drains S.E.
11.40	West foot of rocky ridge about 50 ft. above the sec. cor., bears N. 20° E. and S. 20° W.; ascend more rapidly.
19.40	Top of ridge about 100 ft. above the foot, bears N. 20° E. and S. 20° W.; descend.
35.00	Bottom of hollow at E. foot of rocky ridge, drains S. 20° E. foot of ridge bears N. 20° W. and S. 20° E. ascend.

Retracement of E.bdy.of T.42 S., R.14 W.-Continued.

Chains.

- 36.80 Top of main ridge about 50 ft.above bottom of hollow,bears S.15° E.and N.15° W.;thence descend on E. slope of ridge.
- 41.10 Fall 2 lks.N.of the old 1/4 sec.cor.,which is a gray sandstone,6x10x6 ins.above ground,marked and witnessed as described by the Surveyor General.
- 47.35 Road bears N.E.and S.W.
- 64.40 Foot of ridge about 100 ft.below the top,bears N.20° W.and S.20° E.;ascend over broken ridges on Harrisburg Bench.
- 71.30 Telegraph line bears N.E.and S.W.
- 82.40 Fall 48 lks.S.of the old cor.of secs.3,4,33 and 34, which is a gray sandstone 12x14x4 ins.above ground, marked and witnessed as described by the Surveyor General.

The course of this line is therefore N.89° 40' E.

Land mountainous and broken ridges.

Soil,sandy,gravelly clay and stony;2nd. and 4th.rate.

Mountainous land on 82.40 chs.

May 27,1899:At this cor.I set off 21^h 22' N. on the decl.arc;and,at 11^h 57^m a.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37° 12' N.

From the cor.of secs.3,4,33 and 34,heretofore described,I continue retracement of W.bdy.of Tp.as follows:

East,bet.secs.3 and 34.

Over Harrisburg Bench,nearly level;in clay,sandy gravelly and stony ground;through scattering sage, iron wood and service-berry undergrowth.

- 2.54 Road from Salt Lake City to Washington and St.George, bears N.80° E.and S.80° W.
- 12.20 Wash 6 ft.wide and 6 ft.deep,drains S.30° W.
- 12.70 Road from Salt Lake City to Washington and St.George bears N.30° E.and S.30° W.
- 23.20 West foot of burnt sandstone mountain bears N.40° E. and S.40° W.;ascend N.W.slope of mountain.

Retracement of N.bdy.of T.42 S.,R.14 W.-Continued.

Chains.	
27.80	Top of mountain about 50 ft.above the foot,bears N. 40° E.and S.40° W.;descend abruptly over broken ledges on S.E.slope of mountain.
41.24	Fall 14 lks.S.of the old 1/4 sec.cor.,which is a gray sandstone 9x10x4 ins.above ground,marked and witnessed as described by the Surveyor General. This cor.is in a ravine at the foot of the mountain, which bears N.E.and S.W.,about 200 ft.below the top. Descend over broken clay and gypsum foot hills.
82.70	Fall 7 lks.N.of the cor.of secs.2,3,34 and 35,which is a gray sandstone 7x10x5 ins.above ground,marked and witnessed as described by the Surveyor General. The course of this line is therefore S.89° 57' E. Land on Harrisburg bench,rolling;E.of bench Mountainous and broken foot hills. Soil,clay,sandy,stone and gypsum;3rd.and 4th.rate. Mountainous land on 59.50 chs.

From the cor.of secs.2,3,34 and 35,heretofore described,I continue retracement of N.bdy.of Tp.as follows:

E.bet.secs.2 and 35.

Over broken clay and gypsum foot hills and ridges; with numerous small ravines and hollows draining S.E.and S.to the Virgin River;through scattering sage,greasewood and iron wood undergrowth.

41.24	Fall 6 lks.S.of the old 1/4 sec.cor.,which is a red sand stone 8x12x4 ins.above ground,marked and witnessed as described by the Surveyor General.
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At W.foot of sandstone mountain which bears N.70° E. and S.70° W.,about 100 ft.above the sec.cor;ascend rapidly on N.W.slope.

47.00	Top of sandstone and granite mountain about 200 ft. above the foot,bears N.60° E.and S.60° W.;descend rapidly on S.E.slope.
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66.00	East foot of mountain about 175 ft.below the top, and enter field and pasture bears N.40° E.and S.40°
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Retracement of N.bdy.of T.42 S.,R.14 W.-Continued.

Chains.	W.
69.20	Irrigation ditch 2 ft.wide,1 ft.deep drains S.30° W.
74.90	Irrigation ditch about 2 ft.wide and 2 ft.deep, drains S.10° W.
77.00	Leave farm and enter pasture land bears N.20° E and S. 20° W.
80.22	Fence on E.side of pasture bears N.10° E.and S.10° W.
80.38	Set a volcanic stone 30x15x8 ins.,23 ins.in the ground,for Meander cor.of frac1.secs.2 and 35,marked M.C.on E., T.41 S.and S.35 on N.,R.14 W.on W.,T.42 S. and S.2 on S.faces;dug pit 36x36x12 ins.,8 ft.W. of stone;and raised a mound of earth and stone 4 ft. base,2 ft.high W.of cor. On W.bank of the Rio Virgin. Before permanently establishing this Meander cor. I determine the true line and placed the cor.as descri bed on the true line 7 lks.S.of my random line. Thence along the river bottom.
83.60	Edge of water on W.side of the Rio Virgin,160 lks. wide,with low bank on W.side,runs S.W.,water about 1 1/2 ft.deep,rapid current,fresh water,gravelly bottom,rises and falls very suddenly.
85.00	Point for cor.of secs.1,2,35 and 36,falls in the E. edge of the river and is missing.,At 1.00 ch.E.of this point I find the old witness cor.of secs.1,2,35 and 36 8 lks.S.of my line,which is a blue boulder stone 6x10x6 ins.above ground,marked and witnessed as described by the Surveyor General.The falling therefore is 8 lks.N.of the point for cor.of secs. 1,2,35 and 36,in the river,and the course of the true line bet.secs.2 and 35 is S.89° 57' E. Land broken foot hills,ridges and mountainous of W.side of River bottom;in river bottom nearly level. Soil,clay,gypsum,gravelly and stony on W.66.00 chs; 3rd.and 4th.rate. In farm and pastur sandy and loamy; 2nd.and 1st.rate. Mountainous land on 66.00 chs. Note:The line runs through the center of Workman's farm and pasture,which bears N.30° E.and S.30° W. about 20.00 chs,lying between the Mountain range on the N.W.and the Rio Virgin on the S.E.

Retracement of N.bdy.of T.42 S.,R.14 W.-Continued.

- Chains. From the point for cor.of secs.1,2,35 and 36,
in E.edge of the Rio Virgin, 1.00 ch. ^{N 88° 57' W} of the witness
cor., heretofore described, I continue retracement of
N.bdy.of Tp.as follows :
- E.bet.secs.1 and 36.
In Virgin River.
- .20 E.edge of Rio Virgin.
- .30 E.bank of the Rio Virgin.The point for Meander cor.
falls at foot of caving bank about 8 ft.high and
cannot be set.
- .40 Enter pasture and field in river bottom bears N.20°
E.and S.20° W.
- .55 Set a volcanic boulder stone 24x16x12 ins., 18 ins.
in the ground, for witness cor.for Meander cor.of
fractional secs.1 and 36, marked W.C.and M.C.on W.
T.41 S.and S.36 on N., R.14 W.on E., and T.42 S., S.1.
on S.faces; dug pit 36x36x12 ins., 8 ft.E.of stone;
and raised a mound of earth, 4 ft.base, 2 ft.high, E.
of cor.
- 1.00 The witness cor.for cor.of secs 1,2,35 and 36, here-
tofore described.
Thence over almost level river bottom in pasture
and farm land; in rich sandy soil; through scattering
sage, iron wood and thornwood or mosquito.
- 8.55 Road bears N.10° W.and S.10° E.
- 19.80 W.foot of volcanic ledges on E.side of river bottom,
bears N.and S.; leave field and pasture and ascend
abruptly over volcanic ledges.
- 21.55 Top of ledges about 150 ft.above the foot, bears N.
20° W.and S.10° E; thence descend over broken reefs
and ridges on top of volcanic bench.
- 40.09 Fall 4 lks.N.of the old 1/4 sec.cor., which is a
lava cinder 6x8x4 ins., above ground, marked and wit-
nessed as described by the Surveyor General.
Corner about 50 ft.below top of ridge.
Thence ascend gradually.
- 56.95 Road bears N.W.and S.E.
- 63.20 Old irrigation ditch drains S.75° W.
- 63.35 Road from Virgin City to farms in river bottom and
and Washington, bears S.E.and N.W.
- 80.20 Fall 7 lks.N.of the cor.of Tps.41 and 42 S.R.14 W.-

Retracement of N.bdy.of T.42 S.,R.14 W.-Continued.

Chains. being the N.E.cor.of T.42 S.,R.14 W.-, which is a black lava cinder, 6x12x10 ins. above ground, marked and witnessed as described by the Surveyor General. The course of this line is therefore S.89° 57' E. Land in river bottom nearly level; on bench and ridges mountainous and broken. Soil, sandy and loamy in river bottom; 1st. and 2nd. rate; on ridges, clay, gravelly and stony; 4th. rate. Mountainous land on 60.40 chs.

May 27, 1899...

Mayhew H. Dalley
U.S. Deputy Surveyor

Retracement of E.bdy.of T.42 S.,R.14 W.

Chains.	May 27, 1899: At the cor. of Tps. 41 and 42 S., R. 14 W. N.E. cor. of T. 42 S., R. 14 W. - heretofore described, 6.80 chs. S. $0^{\circ} 29'$ W. of the closing cor. of Tps. 41 and 42 S., R. 13 W., I set off $37^{\circ} 12'$ N. on the lat. arc; $21^{\circ} 25'$ N. on the decl. arc; and at 5 ^h p.m., l.m.t., determine a true meridian with the solar.
	Thence I run
	S. $0^{\circ} 7'$ W. on a blank line bet. secs. 1 and 6.
41.20	Fall 04 lks. E. of the old $1/4$ sec. cor., which is a volcanic stone 10x8x7 ins. above ground, marked and witnessed as described by the Surveyor General.
74.82	Fall 07 lks. E. of the closing cor. of secs. 6 and 7, T. 42 S., R. 13 W., which is a lava stone in place 20x20x12 ins., above ground, with a cross (X) at exact cor. point, marked and witnessed as described by the Surveyor General.
	The course of this line is therefore S. $0^{\circ} 16'$ W.
	Thence I run
	N. $0^{\circ} 10'$ E. on a true line on E. bdy. of sec. 1.
	Ascend over broken lava ridges and foot hills; through scattering sage, greasewood, castus and iron wood undergrowth.
27.30	Road bears N.W. and S.E.
33.62	The old $1/4$ sec. cor., heretofore described on line.
34.82	S. foot of spur of mountain about 50 ft. above the closing sec. cor., bears E. and W.; rapid ascent on S. slope of spur.
39.64	Road on top of spur of mountain bears E. and N.W.; spur of mountain bears E. and W. About 50 ft. above foot of spur.; descend on N. slope of spur.
40.00	Set a gray sandstone 12x10x5 ins., 8 ins. in the ground, for $1/4$ cor. of sec. 1, marked $1/4$ on W. face; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, W. of cor. Pits impracticable.
43.82	N. foot of spur of volcanic mountain, about 50 ft. below the top, bears N. 70° E. and joins main ridge or mountain at about 10.00 chs. dist., and S. 70° W. about 5.00 chs. to W. point of spur.; thence over rolling and broken volcanic bench with drainage to W. and N.W.
47.82	Wash about 10 ft. wide and 4 ft. deep, drains W.

Reinforcement of E.bdy. of T.42 S., R.14 W.-Continued.

Chain . . .

74.03 Road from Virgin City to Washington bears E. and S.
700 W.

74.82 The cor. of Tps. 41 and 42 S., R. 14 W., heretofore
described.

Land broken ridges and foot hills, mountainous and
broken rolling bench.

Soil, clay, stony sandy and gravelly; 3rd. and 4th. rate.
No timber.

Undergrowth, sage, greasewood, cactus and iron wood.
Mountainous land on 43.82 chs.

May 27, 1899.

GENERAL DESCRIPTION.

For General Description see Subdivision notes
of this Township.

Matthew H. Dalley
U. S. Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Mayhew H. Dalley
whom we, United States Deputy Surveyor, to assist in running, measuring, and
making the lines and corners described in the foregoing field notes of the survey of the West, North
and East Boundaries of Township No. 42 South, Range No. 14 West, of the
Salt Lake Base and Meridian, in the State of Utah.

giving the respective capacities in which they acted:

Albert C. Dalley, , Chainman.

Heber Dalley, , Chainman.

Daniel S. Macfarlane, , Moundman.

David Dix, , Moundman.

Daniel S. Macfarlane, , Axman.

Henry Houchen, , Axman.

David Dix, , Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Mayhew H. Dalley
whom we, United States Deputy Surveyor, in surveying all
parts or portions of the West, North and East Boundaries of Township No. 42
South, Range No. 14 West,

..... of the Salt Lake
Base and meridian, in the State of Utah, which are represented
by the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
other monuments established, according to the instructions furnished by the United States Surveyor
General for the State of Utah.

Albert C. Dalley, , Chainman.

Heber Dalley, , Chainman.

Daniel S. Macfarlane, , Moundman.

David Dix, , Moundman.

Daniel S. Macfarlane, , Axman.

Henry Houchen, , Axman.

David Dix, , Flagman.

Subscribed and sworn to before me this 21st.
day of July, 1899.



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public, Iron County, Utah.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dalley United States Deputy Surveyor,
 solemnly swear that, in pursuance of a contract received from Jacob B. Blair
 United States Surveyor General for the State of Utah, bearing date of
23rd. day of January, 1899, I have well, faithfully, and truly, in my
 proper person, and in strict conformity with the instructions furnished by the United States Surveyor
 General for the State of Utah, the Manual of Surveying Instructions, and the laws of
 United States, surveyed all those parts or portions of West, North and East
 Boundaries of Township No. 42 South, Range No. 14 West, of the

..... of the Salt Lake
Base and meridian, in the State of Utah, which are represented in the
 foregoing field notes as having been surveyed by me, and under my direction; and I do further sole-
 swear that all the corners of said survey have been established and perpetuated in strict accordance with
 the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor
 General for the State of Utah, and in the specific manner described in the field notes, and
 the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer
 the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Mayhew H. Dalley
 United States Deputy Surveyor

Subscribed by said Mayhew H. Dalley, and sworn to before me }
 this 31st day of May, 1901, 1899.



Edward Henderson
 U.S. Surveyor General

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 17, 1902
 The foregoing field notes of the survey of The North Boundary and
adjustment and resurvey of the North & East Bound
of Township 42 South, Range 14 West of the Salt
Lake Base & Meridian, Utah.

executed by Mayhew H. Dalley
 under his contract No. 224, dated January 23, 1899, having l-
 critically examined, and the necessary corrections and explanations made, the said field notes, and
 surveys they describe, are hereby approved.

Edward Henderson
 United States Surveyor

I certify that the foregoing transcript of the field notes of the above-described surveys in
 has been correctly copied from the original notes on file in this office.

United States Surveyor Gen.

State of Utah.

BOOK A-282

County of Washington.

ss.

Max Woodbury being duly Sworn according to law; says: that I will well and faithfully execute the duty of Chainman that I will level the Chain upon even and uneven ground and will plumbally pins either by sticking or dropping the same : that I will report the ^{True} ~~time~~ and distance to all notable objects and the true length of all lines : that I will assist in measuring to the best of my skill and ability and in accordance with the instructions given me in the survey of ^{meander lines of} Township Forty two (42) South of Range Fourteen (14) West : ~~and Township Forty two (42) South of Range Fifteen (15) West and Township Forty two (42) South of Range Sixteen (16) West of Salt Lake Meridian.~~ ^{base and}

Max Woodbury.

Subscribed and Sworn to before me this 14th day of June A. D. 1899.

Frederic E. Daggin
Notary Public .

My Commission Expires

Sept 30th 1902.

PRELIMINARY OATHS OF ASSISTANTS.

53A

WE, Albert C. Dalley and Heber Dalley,
solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the
ground over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that
we will report the true distances to all notable objects, and the true lengths of all lines that we assist in
surveying, to the best of our skill and ability, and in accordance with instructions given us, in the survey of
the Meander Lines of Township No. 42 South, Range No. 14 West, of the
Salt Lake Base and Meridian, in the State of Utah.

Albert C. Dalley, Chainman.
Heber Dalley, Chainman.

scribed and sworn to before me this 12th
day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public

WE, Daniel S. Macfarlane and David Dix,
solemnly swear that we will well and truly perform the duties of moundmen in the establishment
of corners, according to the instructions given us, to the best of our skill and ability, in the survey of
the Meander Lines of Township No. 42 South, Range No. 14 West, of the
Salt Lake Base and Meridian, in the State of Utah.

Daniel S. Macfarlane, Moundman.
David Dix, Moundman.

scribed and sworn to before me this 12th
day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public

WE, Daniel S. Macfarlane and Henry Houchen,
solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners
and other duties, according to instructions given us, to the best of our skill and ability, in the survey of
the Meander Lines of Township No. 42 South, Range No. 14 West, of the
Salt Lake Base and Meridian, in the State of Utah.

Daniel S. Macfarlane, Axman.
Henry Houchen, Axman.

scribed and sworn to before me this 12th
day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public

I, David Dix, do solemnly swear that I will well and truly
perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the
survey of the Meander Lines of Township No. 42 South, Range No. 14 West of
Salt Lake Base and Meridian, in the State of Utah.

David Dix, Flagman.

scribed and sworn to before me this 12th
day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public

I, Heber Dalley, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the Meander Lines of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah.

Heber Dalley Flagman.

Subscribe and sworn to before me this 12th day of May, 1899

My Commission Expires
March 23rd, 1900



Senora C. Dalley
Notary Public, Iron County, Utah.

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INDEX DIAGRAM.

Township....., Range.....

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Albert C. Dalley and Heber Dalley
solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the
in over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that
will report the true distances to all notable objects, and the true lengths of all lines that we assist in
suring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of
e Subdivisions of Township No. 42 South, Range No. 14 West, Salt Lake
se and Meridian, in the State of Utah.

Albert C. Dalley Chainman.
Heber Dalley Chainman.

Subscribed and sworn to before me this 12th
day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public

WE, Daniel S. Macfarlane and David Dix
solemnly swear that we will well and truly perform the duties of moundmen in the establishment
corners, according to the instructions given us, to the best of our skill and ability, in the survey of
Subdivisions of Township No. 42 South, Range No. 14 West, of the
Salt Lake Base and Meridian, in the State of Utah.

Daniel S. Macfarlane Moundman.
David Dix Moundman.

Subscribed and sworn to before me this 12th
day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public

WE, Daniel S. Macfarlane and Henry Kouchen
solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners
other duties, according to instructions given us, to the best of our skill and ability, in the survey of
Subdivisions of Township No. 42 South, Range No. 14 West, of the
Salt Lake Base and Meridian, in the State of Utah.

Daniel S. Macfarlane Axman.
Henry Kouchen Axman.

Subscribed and sworn to before me this 12th
day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public

I, David Dix, do solemnly swear that I will well and truly
the duties of flagman according to instructions given me, to the best of my skill and ability, in the
y of the subdivisions of Township No. 42 South, Range No. 14 West,
ie Salt Lake Base and Meridian, in the State of Utah.

David Dix Flagman.

Subscribed and sworn to before me this 12th
day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public

BOOK A-282

INDEX DIAGRAM.

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Meanders Page.....

NAMES AND DUTIES OF ASSISTANTS.

✓ Albert C. Dalley,	Chainman.
✓ Heber Dalley,	Chainman.
✓ <i>Max Woodbury</i>	<i>Chainman</i>
✓ Daniel S. Macfarlane,	Moundman.
✓ David Dix	Moundman.
✓ Daniel S. Macfarlane,	Axman.
✓ Henry Houchen,	Axman.
✓ David Dix,	Flagman.
✓ <i>Helius Dalley</i>	<i>Flagman</i>

*Exd
9/21/00*

Filed Dec 13, 1900

Filed Dec 13, 1900

4-679.

C.

BOOK A-282

N. 3. 13.

FIELD NOTES

OF THE SURVEY OF THE

S U B D I V I S I O N S

*and
Meanders*

OF

TOWNSHIP NO. 42 SOUTH, RANGE NO. 14 WEST

Of the SALT LAKE BASE AND Meridian,

in the State of Utah.

AS SURVEYED BY

Mayhew H. Dalley, United States Deputy Surveyor

Under his Contract No. 224, dated January 23rd, 189

Survey commenced May 29, 189

Survey completed June 23, 189

6-151

*17 18 12 ✓
16 17 76 ✓
16 36 ✓
11 61.40 ✓
3 45 72 ✓*

*20-14
15 74*

Subdivisions of T.42 S., R.14 W.

Chains.

Survey commenced May, 29, 1899, and executed with a W. and L. E. Gurley Light Mountain Solar Transit for description of which see notes of S. bdy. of Tp. 42 S. R. 14 W., Book A.

May 29, 1899: Before commencing the subdivisions of the unsubdivided portions of the Tp., I return to the meridian established May 23, 1899, from Polaris, at the cor. of Tps. 42 and 43 S., R. 13 and 14 W., heretofore described. At 7^h a.m., l.m.t., I set off 37° 7' N. on the latitude arc; 210° 40' N. on the decl. arc; and test the adjustments of my solar, finding it gives the same meridian as before and the adjustments are correct.

I commence at the cor. of secs. 1, 2, 35 and 36, on the S. bdy. of the Tp., which I established May 25, 1899.

Thence I run

North, 00° 6' E., bet. secs. 35 and 36.

Descend gradually over top of sandstone mountain sloping N.W.; through dense sage, greasewood and cactus undergrowth; in stony and sandy soil.

- 19.00 Sandstone butte about 150 ft. long, and 25 ft. high, bears E. about 2.00 chs.
- 20.00 Enter sandstone reefs bears N.E. and S.W.
- 26.00 Sandstone butte about 100 ft. long and 25 ft. high, bears E. about 6.00 chs.
- 31.00 Sandstone butte about 150 ft. long and 40 ft. wide, bears E. about 5.00 chs.
- 38.00 South foot of sandstone butte about 120 ft. long N. and S., and 20 ft. wide, and 40 ft. high, on the line, bears E. and W.
- 40.00 Set a red sandstone 18x14x7 ins., 12 ins. deep in a mound of stone, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Hard sandstone surface prevented setting the cor. stone deeper. This cor. is about 100 ft. below the sec. cor. on sandstone reefs sloping N.W.
- 47.00 Foot of sandstone reefs in bottom of hollow about 75 feet below the sec. cor., bears N. 40° E. and S. 40° W.; hollow drains N. 40° E.; thence ascend S.E. slope of hollow.
- 48.10 Top of hollow about 25 ft. above the bottom, bears

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	N.40° E.and S.40° W.;thence descend over sandy, stony ground.
62.00	Top of perpendicular ledges on S.side of hollow or chasm, about 50 ft.below the top of hollow, bears N.E. and S.W.;thence descend abruptly into hollow.
64.00	Ravine in bottom of hollow about 35 ft.below the top of ledges, about 6 ft.wide and 6 ft.deep, drains N.50° E.;ascend from ravine on S.E.slope of hollow.
66.00	Top of ledges on N.side of chasm or hollow, about 25 ft.above the bottom, bears N.50° E.and S.50° W.;thence descend over sandstone reefs.
80.00	Set a red sandstone 26x10x8 ins., 20 ins.deep in a mound of stone, for cor.of secs.25, 26, 35 and 36, marked with I notch on the S.and E.edges; and raised a mound of stone, 2 ft.base, 1 1/2 ft.high, W.of cor.Pits impracticable.Hard sandstone surface prevented setting the cor.stone deeper. This cor.is about 50 ft.below where descent begins over sandstone reefs. Land mountainous, and broken. Soil, sandy and stony; 3rd.and 4th.rate. No timber Mountainous land and dense undergrowth on 80.00 chs.
	East on a random line bet.secs.25 and 36.
40.00	Set temp.1/4 sec.cor. N.0°07' E.
80.04	Intersect E.bdy.of Tp., 21 lks. of the closing cor.of secs.30 and 31, T.42 S., R.13 W., which is a red sandstone 4x12x5 ins.above ground, marked and witnessed as described by the Surveyor General. I obliterate all marks pertaining to the closing cor. and re-mark this stone for cor.of secs.25, 30, 31 and 36, with I notch on the S.and 5 notches on the N.edges; dug pits 18x18x12 ins., in each sec., 5 1/2 ft.dist; and raised a mound of earth, 4 ft.base, 2 ft.high, W.of cor. I destroy all traces of the old cor.of secs.25, 30, 31 and 36, which bears S.0° 07' W., 21.97 chs.dist. Thence I run North, 89° 51' W.on a true line bet.secs.25 and 36.

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Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	Over almost level ground, gently sloping N.; in rich sandy soil; through dense sage, greasewood and cactus undergrowth.
38.10	Top of ascent about 100 ft. above the sec. cor., bears N. 30° E. and S. 30° W.; descend gradually over rolling sand hills and ridges.
40.02	Set a gray sandstone 22x18x7 ins., 17 ins. in the ground, for 1/4 sec. cor.; marked 1/4 on N. face; dug pits 18x18 x12 ins., E. and W. of stone 3 ft. dist.; and raised a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, N. of cor. A sandstone butte about 40x20x10 ft., bears S. about 2.00 chs. dist. from cor.
43.40	Foot of sandridge in bottom of hollow about 25 ft. below the 1/4 sec. cor., bears N. 40° E. and S. 40° W.; hollow drains N. 40° E.; thence ascend over broken sandstone reefs and ridges.
77.20	Top of sandstone ridges about 150 ft. above the 1/4 sec. cor., bears N. 40° E. and S. 40° W.; thence descend gradually over top of ridge.
80.04	The cor. of secs. 25, 26, 35 and 36. Cor. is about 25 ft. below top of sandridge on N. slope. Land almost level, rolling sandhills and mountainous land. Soil, sandy, and stony; 2nd. and 4th. rate. No timber. Dense sage, greasewood service berry and cactus undergrowth on 80.04 chs. Mountainous land on 36.64 chs. Canada root or sour dock grows abundantly in N.E. 1/4 of sec. 36, and in S. 1/2 of sec. 25. May 29, 1899: At this cor. I set off 210° 41' N. on the decl. arc; and, at 11h. 57' a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 8' N.
20.54	North, 0° 6' E., bet. secs. 25 and 26. Descend rapidly over broken sandridges, on N.W. slope; through dense sage and greasewood undergrowth; in stony and sandy soil. Foot of sandstone mountain or sandridges about 200

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	ft. below the sec. cor., bears N.E. and S.W.; thence descend gradually over rolling sandhills; in rich sandy soil.
38.54	Road from Washington to the Canaigara grounds, in S.E. cor. of Tp., bears N. 40° W. and S. 40° E.
40.00	Set a red sandstone 30x12x6 ins., 23 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor. Enter dense cactus undergrowth bears N. and S.; still in sage and greasewood.
80.00	Set a red sandstone 30x14x4 ins., 23 ins. in the ground, for cor. of secs. 23, 24, 25 and 26, marked with 2 notches on the S. and 1 notch on the E. edges; dug pits 18x18x12 ins., in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land mountainous and rolling sand hills. Soil, sandy and stony, and rich sandy soil; 4th and 2nd. rate. No timber. Dense greasewood, sage or cactus undergrowth on 80.00 chs. Mountainous land on 20.54 chs.
	S. 89° 51' E. on a random line, bet secs. 24 and 25.
40.00	Set temp. 1/4 sec. cor. N. 0° 07' E.
79.88	Intersect the E. bdy. of the Tp. 11 lks. off the closing cor. of secs. 19 and 30, T. 42 S., R. 13 W., which is a black lava stone 5x6x6 ins. above ground, marked and witnessed as described by the Surveyor General. I obliterate all marks pertaining to the closing cor., and re-mark this stone for cor. of secs. 19, 24, 25 and 30, with 2 notches on the S. and 4 notches on the N. edges; dug pits 18x18x12 ins., in each sec., 5 1/2 ft. dist.; and raised a mound of earth 4 ft. base, 1 1/2 ft. high, W. of cor. I obliterate all traces of the old cor. of secs. 19, 24, 25 and 30, which bears S. 0° 07' W., 19.51 chs. dist. from the new cor. May 29, 1899: At 4h p.m., l.m.t., I set off 370 9' N. on

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	the lat.arc; $21^{\circ} 43'$ N. on the decl.arc; and determine a true meridian with the solar at the cor. of secs. 19, 24, 25 and 30. Thence I run N. $89^{\circ} 46'$ W. on a true line bet. secs. 24 and 25. Ascend gradually over rolling land, almost level; in gravelly sandy and stony soil; through dense greasewood, prickly sage and cactus undergrowth.
4.46	Trail bears N. 30° W. and S. 30° E.
29.50	E. side of storm water pond, in alkali flat, course N. 10° W. and S. 10° E. about 10.00 chs, and 4.50 chs. wide, Road from Berry Spring to Canaigara grounds bears N. and S.
39.94	Set a red sandstone $28 \times 14 \times 5$ ins., 21 ins., in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; dug pits $18 \times 18 \times 12$ ins., E. and W. of stone, 3 ft. dist.; and raised a mound of earth, $3 \frac{1}{2}$ ft. base, $1 \frac{1}{2}$ ft. high, N. of cor. This cor. is on sandhills about 50 ft. above the sec. cor.
79.88	The cor. of secs. 23, 24, 25 and 26. This cor. about 75 ft. above the $1/4$ sec. cor. Land level and rolling sand hills. Soil, sandy, gravelly and stony, and rich sandy soil; 3rd. 4th. and 2nd. rate. No timber. Dense sage, greasewood and cactus undergrowth on 79.88 chs. Canaigara root or sour dock grows abundantly in E. $1/2$ of secs. 24 and 25. May 29, 1899.

May 30, 1899: At $8^h 57^m$ a.m., l.m.t., I set off $37^{\circ} 9'$ N. on the lat.arc; $21^{\circ} 49'$ N. on the decl.arc; and determine a true meridian with the solar, at the cor. of secs. 23, 24, 25 and 26.

Thence I run.

North, $0^{\circ} 6'$ E., bet. secs. 23 and 24.

Ascend gradually over low rolling sandhills; in sandy, gravelly and stony soil; through dense greasewood and

Subdivisions of T.42 S., R.14 W.-Continued.

Chains, sage undergrowth.

17.00 Foot of sandridge about 75 ft. above the sec. cor., bears E. and W.; ascend more rapidly.

23.50 Top of sandridge about 150 ft. above the sec. cor., bears E. and W.; thence ascend more gradually over top of sandridge, sloping W. and N.W.

40.00 Set a red sandstone 40x18x5 ins., 30 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

64.00 Top of ascent on high sandridge, about 300 ft. above the sec. cor., bears N.W. and S.E.; thence descend gradually on N.W. slope of sandridge.

80.00 Set a red sandstone 16x10x6 ins., 11 ins. in the ground, for cor. of secs. 13, 14, 23 and 24, marked with 3 notches on the S. and 1 notch on the E. edges; dug pits 18x18x12 ins., in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

This cor. is on N.W. slope of sandridge about 75 ft. below top of ascent.

Land rolling sandhills and mountainous.

Soil, sandy, gravelly and stony; 2nd. and 4th. rate.

Dense greasewood and sage undergrowth on 80.00 chs.

Mountainous land on 63.00 chs. No timber.

S. 89° 46' E. on a random line bet. secs. 13 and 24.

40.00 Set temp. 1/4 sec. cor. N. 00° 07' W.

79.80 Intersect E. bdy. of the Tp. 18 lks. N. of the closing cor. of secs. 18 and 19, T. 42 S., R. 13 W., which is a lava stone 5x10x8 ins., above ground, marked and witnessed as described by the Surveyor General.

I obliterate all marks pertaining to the closing cor. and re-mark this stone for cor. of secs. 13, 18, 19 and 24, with 3 notches on the N. and S. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

Pits impracticable.

I destroy all traces of the old cor. of secs. 13, 18, 19 and 24, which I find S 00° 07' W., 17.04 chs. dist from

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Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	the new cor. Thence I run N.89° 38' W., on a true line bet. secs.13 and 24. Descend gradually over stony, sandy and gravelly soil; through scattering greasewood, iron wood and cactus undergrowth.
6.50	Road from Berry Spring to Canaigara grounds bears N. and S.E.
7.50	Trail bears N.10° E. and S.10° W.
9.70	Road from Berry Spring to Canaigara grounds bears N. and S.
19.70	Bottom of hollow at foot of descent, about 50 ft. below the sec. cor., drains N.20° E.; thence ascend E. slope of sand ridge.
20.84	Trail bears N.5° E. and S.5° W.
21.60	Trail bears N.10° E. and S.10° W.
39.90	Set a red sandstone 24x12x5 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18 x12 ins., E. and W. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor. This cor. is on E. slope of sand ridge about 150 ft. above the sec. cor.; ascend more rapidly.
44.00	Foot of sandstone reefs about 75 ft. above the 1/4 sec. cor., bears N.10° E. and S.10° W.; thence ascend ab- ruptly over reefs.
47.70	Top of sandstone reefs about 75 ft. above the foot, bears N.10° E. and S.10° W.; thence ascend gradually over flat top of sandridge.
72.40	Top of ascent about 200 ft. above the 1/4 sec. cor., on top of sandstone ridge; bears N. and S.; thence de- scend on W. slope of sandridge. Enter dense sage and greasewood undergrowth bears N. and S.; leave scat- tering undergrowth.
79.80	The cor. of secs. 13, 14, 23 and 24. Cor. about 75 ft. below top of sandridge.
9.10 19.70	Land, rolling foot hills, and mountainous land. Soil, stony, gravelly and sandy; 4th. and 3rd. rate. Dense sage and greasewood undergrowth on 7.40 chs. Mountainous land on 60.10 chs. No timber.
	May 30, 1899: At this cor. I set off 210 50' N. on the decl. arc; and at 11 ^h 57 ^m a.m., l.m.t., observe the sun

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	on the meridian; the resulting lat. is $37^{\circ} 09'$ N.
	N., $0^{\circ} 6'$ E., bet. secs. 13 and 14.
	Ascend gradually on S.W. slope of sandridge; through dense sage, greasewood and scattering cactus undergrowth in sandy, stony clay and gravelly soil.
7.50	Top of sandridge about 50 ft. above the sec. cor., . . . bears N.W. and S.E.; thence descend on N.E. slope of sandridge; leave dense undergrowth and enter scattering undergrowth.
13.00	Foot of sandstone butte at N. foot of sandridge, about 100 ft. below top of ridge, about 5.00 chs. long on E. and W. course, and about 50 ft. high.
17.50	N. foot of butte about 60 ft. below the top bears E. and W.; thence descend gradually over almost level bench land,
20.00	Leave scattering undergrowth and enter dense sage, greasewood and tall dense cactus undergrowth, and rich loamy, gravelly soil; bears S.E. and N.W.
40.00	Set a red sandstone $26 \times 10 \times 6$ ins., 21 ins., in the ground for $1/4$ sec. cor., marked $1/4$ on W. face; dug pits $18 \times 18 \times 12$ ins., N. and S. of stone 3 ft. dist.; and raised a mound of earth, $3 \frac{1}{2}$ ft. base, $1 \frac{1}{2}$ ft. high, W. of cor.
80.00	Set a red sandstone $20 \times 14 \times 4$ ins., 15 ins., in the ground, for cor. of secs. 11, 12, 13 and 14, marked with 4 notches on the S. and 1 notch on the E. edges; dug pits $18 \times 18 \times 12$ ins., in each sec., $5 \frac{1}{2}$ ft. dist.; and raised a mound of earth, 4 ft. base, $1 \frac{1}{2}$ ft. high, W. of cor.
	Land mountainous, and nearly level.
	Soil; sandy, stony, gravelly and loamy; 4th. and 2nd. rate.
	Dense sage, greasewood or cactus undergrowth on 67.50 chs. No timber.
	Mountainous land on 17.50 chs.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	S.89°38' E.on a random line bet.secs.12 and 13.
40.00	Set temp.1/4 sec.cor.
80.10	Intersect E.bdy.of Tp. 3 lks.S.of closing cor.of secs. 7 and 18,T.42 S.,R.13 W.,which is a lava stone 5x8x6 ins.above ground,marked and witnessed as described by the Surveyor General.
	I obliterate all marks pertaining to the closing cor., and re-mark this stone for cor.of secs.7,12,13 and 18 ,with 4 notches on the S.and 2 notches on the N. edges;dug pits 18x18x12 ins.,in each sec.,5 1/2 ft. dist.;and raised a mound of earth,4 ft.base,2 ft.high, W.of cor.
	I destroy all traces of the old cor.of secs.7,12,13 and 18,which I find S 0° 07' W.,14.81 chs.dist.,from the new cor.
	Thence I run
	North,89° 39' W.on a true line bet.secs.12 and 13. Ascend gradually over rolling ground;through dense greasewood and cactus undergrowth;in sandy,gravelly loamy soil.
18.50	Road from Berry Spring to Canaigara grounds in S.E. cor.of Tp.,bears N.20° W.and S.20° E.
40.05	Set a red sandstone 20x12x5 ins.,15 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x 18x12 ins.,E.and W.of stone 3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
Cor.	is on bench about 50 ft.above the sec.cor.
	Thence over almost level bench.
43.80	Trail bears N.5° W.and S.5° E.
80.10	The cor.of secs.11,12,13 and 14.
	Land rolling and nearly level.
	Soil,sandy,stonny and gravelly;4th.rate.On W.20.00 chs. rich sandy-loamy soil;1st.rate. No timber.
	Dense greasewood and cactus undergrowth on 80.10 chs.
	May 30,1899.

May 31,1899:At 7^h 57^m a.m.,l.m.t.,I set off 37°10' N.on the lat.arc;21° 58' N.on the decl.arc;and

Subdivisions of T.42 S., R.14 W.-Continued.

- Chains. determine a true meridian with the solar, at the cor. of secs. 11, 12, 13 and 14.
- Thence I run North, $0^{\circ} 6'$ E., bet. secs. 11 and 12.
- Descend gradually over level and rolling land; in sandy-loamy, gravelly and stony soil; through dense greasewood and cactus undergrowth.
- 28.50 Hollow about 150 ft. wide and 25 ft. deep, drains N. 10° W.
- 33.60 Trail to Virgin River and ranges bears N. 20° W. and S. 20° E.
- 40.00 Set a red sandstone $16 \times 10 \times 5$ ins., 11 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; dug pits $18 \times 18 \times 12$ ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, $3 \frac{1}{2}$ ft. base, $1 \frac{1}{2}$ ft. high, W. of cor. This cor. is on bench about 150 ft. below the sec. cor.
- 44.60 Trail to Virgin River and the ranges bears N. 30° W. and S. 30° E.
- 59.30 Trail bears N. 40° W. and S. 40° E.
- 62.30 Road from Berry Spring to Canaigara grounds at foot of descent, about 50 ft. below the $1/4$ sec. cor., bears N. 40° W. and S. 40° E.; ascend over broken lava ridges. Leave dense undergrowth and enter scattering greasewood, cactus and iron wood undergrowth.
- 74.50 Trail bears N. 40° W. and S. 40° E.
- 78.80 Trail bears N. W. and S. E.
- 80.00 Set a black lava stone $26 \times 20 \times 10$ "20" in the ground, for cor. of secs. 1, 2, 11 and 12, marked with 5 notches on the S. and 1 notch on the E. edges; dug pits $18 \times 18 \times 12$ ins., in each sec., $5 \frac{1}{2}$ ft. dist.; and raised a mound of earth and stone, 4 ft. base, 2 ft. high, W. of cor. Hard lava stone surface prevented digging the pits deeper.
- This cor. is in broken volcanic or lava reefs or ridges about 50 ft. above the foot of ridges.
- Land rolling, and broken reefs or ridges.
- Soil, sandy-loamy, gravelly and stony; 2nd. and 4th. rate.
- Dense greasewood and cactus undergrowth 62.30 chs.
- Mountainous land on 17.70 chs. No timber.

Subdivisions of T.42 S., R.14 W.-Continued.

- Chains. S.89° 39' E.on a random line bet.secs.1 and 12 .
- 40.00 Set temp.1/4 sec.cor.
- 80.30 Intersect E.bdy.of Tp.,16 lks.S.of closing cor.of
secs.6 and 7,T.42 S.,R.13 W.,which is a lava stone in
place 20x20x12 ins.above ground,marked and witnessed
as described by the Surveyor General.
- I obliterate all marks pertaining to the closing cor.
and re-mark.this stone for cor.of secs.1,6,7 and 12,
leaving the 5 grooves on the S.and 1 groove on the N.
of the cross designating the exact corner point,
already cut;and raised a mound of stone 2 ft.base,
1 1/2 ft.high,W.of corner point.Pits impracticable.
I destroy all traces of the old cor.of secs.1,6,7and
12,which bears South 0°07'W,12.60 chs.dist.from the new
corner.
- Thence I run
- N.89° 46' W.on a true line bet.secs.1 and 12.
- Descend over broken lava reefs and ridges;in clay,
gravelly and stony soil;through scattering grease-
wood and iron wood undergrowth.
- 40.15 Set a lava stone 24x12x10 ins.,18 ins.in the ground,
for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18
x12 ins.,E.and W.of stone 3 ft.dist.;and raised a
mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
This cor.is on lava ridge or bench about 100 ft.
below the sec.cor.
- 78.00 Trail bears N.40° W.and S.40° E.
- 80.30 The cor.of secs.1,2,11 and 12. This cor.is about 50
ft.below the 1/4 sec.cor.
- Land broken lava reefs.or ridges.
Soil,clay,gravelly,sandy and stony ;3rd.and 4th.rate.
Scattering greasewood and iron wood undergrowth on
80.00 chs.
- Mountainous land on 80.30 chs. No timber.
- May 31,1899:At this cor.I set off 21° 59' N.on the
decl.arc;and,at 11^h 57' a.m.,l.m.t.,observe the sun
on the meridian;the resulting lat.is 37° 11' N.

Subdivisions of T.42 S., R.14 E.-Continued.

- Chains. North, $0^{\circ} 6'$ E. on a random line bet. secs. 1 and 2...
- 40.00 Set temp. $1/4$ sec. cor.
- 53.63 Set temp. meander cor. of fractional secs. 1 and 2 on S. bank of Rio Virgin.
- 57.29 Set temporary meander cor. of fractional sec. 1 and 2 on N. bank of Rio Virgin; which cor. also stands for temp. witness cor. on the line bet. secs. 1 and 2.
- 75.03 Intersect N. bdy. of Tp. at ~~136~~ lks. N. $89^{\circ} 57'$ W. of witness cor. to cor. of secs. 1, 2, 35 and 36, heretofore described, which point of intersection is ~~36~~ lks. W. of the true corner point in the Virgin River.
- Thence from the true point for the cor. of secs. 1, 2, 35 and 36, in the Rio Virgin, I run
S. $0^{\circ} 22'$ W. on a true line bet. secs. 1 and 2.
- Descend in the waters of the Rio Virgin; in swift current, stony bottom.
- 2.50 W. side of the waters of the Rio Virgin, course S. 10° E. Thence over gravelly, sandy and stony dry bed of river.
- 17.74 Set a white sandstone $18 \times 10 \times 5$ ins., 12 ins. in the ground, for meander cor. of fractional secs. 1 and 2, on the N. bank of the Rio Virgin, marked
M.C. on S. face; with 1 groove on E. face; and raised a mound of stone 2 ft. base, $1 \frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- I also establish this stone as a witness cor. of secs. 1, 2, 35 and 36, with additional marks of 5 notches on E. edge 1 notch on E. edge and W. C. on N. E. face.
- 17.90 E. edge of the waters of the Rio Virgin which drains S. 85° W.
- 21.20 Edge of water on S. side of the Rio Virgin at foot of sloping bank about 15 ft. high. Enter dense willows.
- 21.40 Set a lava stone $16 \times 10 \times 5$ ins., 11 ins. in the ground, for Meander cor. of fractional secs. 1 and 2 on S. bank of Rio Virgin, marked
M.C. on N. face; with 1 groove on E. face; dug pit $36 \times 36 \times 12$ ins., 8 ft. S. of stone; and raised a mound of earth

Subdivisions of T.42 S., R.14 W.-Continued.

- Chains. 4 ft. base, 2 ft. high, S. of cor.
- 22.45 Foot of ledges S. side of river bottom about 40 ft. high, bears N. 50° E. about 5.00 chs., thence S. E.; and S. 50° W. about 10.00 chs., thence N. 70° W. Leave dense willow undergrowth which extends to S. side of Rio Virgin, bears N. 50° E. and S. 50° W.
- 22.50 Top of volcanic ledges. bears N. 50° E. and S. 50° W. Levi T. Jessup's houses and garden at Berry Spring bears N. 67° E. 8.00 chs. and 10.00 chs. dist. Workmans house in river bottom on S. side of his farm and pasture bears N. 50° W. 20.00 chs. dist. Thence gradually ascend over top of ledges.
- 26.15 Road from Virgin City to Washington by way of Berry Spring bears N. 80° E. and S. 80° W.
- 26.55 Road at foot of volcanic ledges about 75 ft. above the bed of Rio Virgin bears N. 40° E. and S. 40° W.; ascend abruptly over ledges.
- 29.70 Top of ledges on volcanic bench about 40 ft. above the foot, bears N. 40° E. and S. 40° W.; thence descend over broken volcanic reefs and ridges.
- 35.03 Set a lava stone 22x14x7 ins., 17 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
- 62.50 Old road from Virgin City to Washington bears N. 85° E. and S. 85° W.
- 75.03 The cor. of secs. 1, 2, 11 and 12. This cor. is on volcanic bench about 100 ft. below the 1/4 sec. cor. Land nearly level in river bottom; broken lava reefs and ridges S. of river bottom. Soil in river bottom, sandy gravelly and rich loam; 3rd. and 1st. rate; on ridges sandy, stony and gravelly; 4th. rate. No timber except scattering cottonwood & ash in river bottom. Willow and rabbit brush undergrowth in river bottom; greasewood and iron wood undergrowth on ridges. Mountainous land on 52.58 chs.

May 31, 1899.

Subdivisions of T.42 S.-R.14 W.,-Continued.

Chains. June 1, 1899: At 7^h a.m., l.m.t., I set off 37° 7' N. on the the lat. arc; 22° 6' N. on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 2, 3, 34 and 35 on S. bdy. of Tp., which I established May 25, 1899.

Thence I run

N. 0° 6' E. bet secs. 34 and 35.

Descend over broken sandridges; through scattering greasewood and cactus undergrowth.

40.00 Set a red sandstone 26x18x6 ins., 20 ins. in the ground for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18 x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor. This cor. is on S.E. slope of sandridge which bears N.E., about 100 ft. below the sec. cor.

Enter dense sage, greasewood and cactus undergrowth, bears N.E. and S.W.; leave scattering undergrowth.

80.00 Set a red sandstone 26x15x5 ins., 20 ins. in the ground for cor. of secs. 26, 27, 34 and 35, marked with 1 notch on the S. and 2 notches on the E. edges; dug pits 18x18 x12 ins., in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor. This cor. is on N. slope of sandridge about 75 ft. below the 1/4 sec. cor.

Land mountainous and broken ridges.

Soil, sandy and stony; 3rd. and 4th. rate. No timber.

Dense sage, greasewood or cactus undergrowth on 40.00 chs.

Mountainous land on 80.00 chs.

East on a random line bet. 26 and 35.

40.00 Set temp. 1/4 sec. cor.

80.30 Intersect N. and S. line 11 lks. S. of cor. of secs. 25, 26, 35 and 36.

Thence I run

S. 89° 55' W. on a true line bet. secs. 26 and 35.

Descend over broken sandridges and sandstone reefs; in sandy stony soil; through dense sage, greasewood and

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Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	cactus undergrowth.
3.90	Wash about 5 ft.wide and 4 ft.deep drains N.50° W.; ascend over sandreefs sloping to N.
6.30	Top of ascent about 50 ft.above the sec.cor., bears N.30° E.and S.30° W.;thence descend over abrupt sandstone reefs.
10.70	Wash at foot of sandstone reefs or ledges about 40 feet below the top,about 10 ft.wide and 10 ft.deep, drains N.30° E.;ascend on S.E.slope of sandstone reefs.
12.30	Top of sandstone reefs or ledges about 50 ft.above the wash,bears N.30° E.and S.30° W.;thence ascend over sandridges.
23.55	Sandstone reef about 75 ft.above the sec.cor.,bears N.40° E.and S.40° W.;descend abruptly.
23.75	Ravine in bottom of hollow about 25 ft.below top of reef,about 6 ft.wide and 6 ft.deep,drains N.40° E.; ascend on S.E.slope of hollow.
25.50	Sandstone reef on W.side of hollow about 40 ft.above ravine,bears N.E.and S.W.;ascend gradually over sandstone reefs.
27.20	A sandstone about 20x10x10 ft.,bears N.about 25 lks.
33.20	Top of sandridge about 140 ft.above the sec.cor., bears N.40° E.and S.40° W.;descend.
40.15	Set a redsandstone 24x10x4 ins.,18 ins.deep in a mound of stone,for 1/4 sec.cor.;marked 1/4 on N.face; and raised a mound of stone,2 ft.base,1 1/2 ft.high, N.of cor. Pits impracticable.Hard sandstone surface prevented setting cor.stone deeper. This cor.is about 25 ft.below top of sandridge.
43.10	Bottom of hollow about 75 ft.below the 1/4 sec.cor., drains N.30° E.;ascend.
47.00	Top of hollow about 30 ft.above the bottom bears N. 40° E.and S.40° W.;thence along the head of hollow.
54.00	Begin ascent of sandridges which bear N.40° E.and S.40° W.
80.30	The cor.of secs.26,27,34 and 35. This cor.is about 100 ft.above the 1/4 sec.cor. Land mountainous,broken sandridges and sandreefs. Soil,sandy and stony;3rd.and 4th.rate. No timber.

Subdivisions of T.42 S.-R.14 W.-Continued.

Chains. Dense greasewood sage and cactus undergrowth on .
80.30 chs.

Mountainous land on 80.30 chs.

North, $0^{\circ} 6'$ E. bet. secs. 26 and 27.

Ascend gradually over broken sandridges, in sandy stony ground; through dense greasewood sage and cactus undergrowth..

I.30 Top of ascent about 10 ft. above the sec. cor., bears N.E. and S.W.; descend on N. slope of sandridges.

40.00 Set a red sandstone $14 \times 12 \times 4$ ins., 11 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; dug pits $18 \times 18 \times 12$ ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, $3 \frac{1}{2}$ ft. base, $1 \frac{1}{2}$ ft. high, W. of cor. This cor. is about 100 ft. below the sec. cor. on N. slope of sandridges.; descend more rapidly.

60.00 Foot of sand mountain about 150 ft. below the $\frac{1}{4}$ sec. corner, bears N. 10° E. and S. 100° W.; descend more gradually; enter sandy soil; leave sandy stony soil.

80.00 Set a red sandstone $20 \times 14 \times 5$ ins., 15 ins. in the ground, for cor. of secs. 22, 23, 26 and 27, marked with 2 notches on S. and E. edges; dug pits $18 \times 18 \times 12$ ins., in each sec. $5 \frac{1}{2}$ ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor. About 75 ft. below foot of mountain. Land mountainous, and rolling sandy foot hills. Soil, stony, and sandy on ridges; 4th. rate. Rich sandy soil on foot hills; 2nd. rate.

No timber.

Dense greasewood, sage and cactus undergrowth on 80.00 chs.

Mountainous land on 60.00 chs.

June 1, 1899: At this cor. I set off $22^{\circ} 7'$ N. on the decl. arc; and, at 11^h 57^m, a.m., l.m.t., observe the sun on the meridian; the resulting lat is $37^{\circ} 09'$ N.

Subdivisions of T.42.S.,R.14.W.-Continued.

Chains.

- N.89° 55' E., on a random line bet.secs.23 and 26.
- 40.00 Set temp.1/4 sec.cor.
- 80.34 Intersect N.and S.line 10 lks. S.of cor.of secs.23, 24,25 and 26.
- Thence I run
- S.89° 51' W. on a true line bet.secs.23 and 26.
- Ascend gradually over rolling sand hills;in rich sandy soil slightly intermixed with gravel;through dense greasewood,sage and cactus undergrowth.
- 40.17 Set a red sandstone 26x14x5 ins.,20 ins. in the ground,for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18x12 ins.E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, N.of cor.
- This cor.is about 50 ft.above the sec.cor.
- 59.10 Road to Canaigara or sour dock grounds from Washington,bears S.E.and N.W.
- 59.34 Enter rich sandy loamy soil bears N.100° E.and S.100° W.;leave sandy-gravelly soil.
- 80.34 The cor.of secs. 22,23,26 and 27.
- This cor.is about 50 ft.above the s 1/4 sec.cor.
- Land,rolling sand hills.
- Soil,sandy,gravelly and rich sandy loam;2nd.and 1st. rate.
- No timber.
- Dense greasewood,sage and cactus undergrowth on 80.34 chs.

N.0° 6' E.,bet.secs. 22 and 23.

Descend gradually over rolling sand hills;in rich sandy,loamy soil;through dense greasewood,sage and cactus undergrowth.

- 40.00 Set a redsandstone 30x14x5 ins.,23 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18 x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.
- This cor.is about 50 ft.below the sec.cor.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	
80.00	<p>Set a red sandstone 20x10x4 ins., 15 ins. in the ground, for cor. of secs. 14, 15, 22 and 23, marked with 3 notches on S. and 2 notches on E. edges; dug pits 18x18x12 ins. in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor.</p> <p>This cor. is about 50 ft. below the 1/4 sec. cor.</p> <p>Land, rolling sandhills.</p> <p>Soil, sandy and sandy-loam; 2nd. and 1st. rate.</p> <p>No timber.</p> <p>Dense greasewood, sage and cactus undergrowth on 80.00 chs.</p>
	June 1, 1899.
	<p>North, 89° 51' E. on a random line bet. secs. 14 and 23.</p>
40.00	Set temp. 1/4 sec. cor.
80.28	<p>Intersect N. and S. line, 2 lks. S. of cor. of secs. 13, 14, 23 and 24</p>
	Thence I run
	S. 89° 50' W. on a true line bet. secs. 14 and 23.
	<p>Descend gradually on W. slope of sandridge; in sandy, gravelly soil; through scattering greasewood and cactus undergrowth.</p>
11.00	<p>Foot of descent about 50 ft. below the sec. cor., bears N. and S.; ascend gradually on E. slope of sandridge.</p>
13.00	<p>Top of ascent about 25 ft. above the foot bears N. and S.; descend gradually.</p>
39.00	<p>Foot of descend at W. foot of sandridge, about 100 ft. below the sec. cor., bears N. and S.; leave gravelly and sandy soil and enter sandy loam, leave scattering undergrowth and enter dense greasewood, sage and cactus undergrowth.</p>
	Ascend gradually over rolling sand hills.
40.14	<p>Set a red sandstone 24x12x6 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18x12 ins., E. and W. of stone 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.</p>
80.28	The cor. of secs. 14, 15, 22 and 23.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	<p>Land mountainous and rolling sand hills. Soil, sandy and gravelly, and sandy-loam; 3rd. and 1st. rate. No timber. Dense sage, greasewood or cactus undergrowth on 41.28 chs. Mountainous land on 39.00 chs. This cor. is about 75 ft. above the 1/4 sec. cor.</p>
12.00	<p>North, $0^{\circ} 6'$ E. bet. secs. 14 and 15. Ascend gradually over rolling sand hills; in rich sandy-loamy soil; through dense greasewood, sage and cactus undergrowth, and scattering iron wood. Foot of sandridge about 25 ft. above the sec. cor., bears E. and W.; ascend more rapidly on S. slope of ridge.</p>
16.00	<p>Top of sandridges about 100 ft. above the sec. cor., bears E. and W.; thence descend over N. slope of sand- ridges. Leave sandy-loamy soil; enter sandy and stony ground.</p>
34.00	<p>Trail bears N. 10° W. and S. 10° E.</p>
40.00	<p>Set a red sandstone 26x16x4 ins., 20 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18 x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor. This cor. is on the N. slope of sandridges which bear N. 40° E. and S. 40° W., about 150 ft. below the top of ridge.</p>
70.00	<p>Leave dense undergrowth and entering scattering greasewood, sage and iron wood undergrowth. Hollow at N. foot of sandridges about 100 ft. below the 1/4 sec. cor., which bears N. 70° W. and S. 70° E. Hollow drains N. 70° W.</p>
74.50	<p>Thence ascend on S. slope of sandridge; extend about Top of sandridge about 50 ft. above the foot bears N. 40° W. and S. 40° E.; descend on N. slope.</p>
78.00	<p>Foot of sandridge about 40 ft. below the top, bears E. and W.; begin ascent of gravelly knoll.</p>
79.60	<p>Top of knoll about 45 ft. above the foot; descend on N.</p>

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	slope of knoll.
80.00	Set a volcanic stone 18x12x12 ins., 12 ins. in the ground, for cor. of secs. 10, 11, 14 and 15, marked with 4 notches on S. and 2 notches on E. edges; dug pits 18x18x12 ins., in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor. This cor. is about 10 ft. below the top of knoll. Land, mountainous, and rolling sand hills. Soil, sandy-loam, gravelly and stony; 1st. and 4th. rate. No timber. Dense greasewood, sage or cactus undergrowth on 40.00 chs. Mountainous land on 68.00 chs. Willow spring, a small spring pure fresh water, emerges from sandstone ledges, runs about 30 gallons per minute, bears S. 39 1/2 ° W., about 45 chs. dist. Water from spring runs in a ravine which drains N.W. and sinks in the sand 5 or 6 chs. dist. from spring. A black willow about 24 ins. in diameter with spreading branches, and from which the spring derives its name, is about 2.00 chs. N. of spring.
	<p>June 2, 1899: At the cor. of secs. 10, 11, 14 and 15, I set off 22° 15' N. on the decl. arc; and, at 11^h 57^m, a.m., observe the sun on the meridian; the resulting lat is 37° 10' " N.</p> <p>North, 89° 50' E. on a random line bet. secs. 11 and 14.</p>
40.00	Set temp. 1/4 sec. cor.
80.30	Intersect N. and S. line 2 lks. N. of cor. secs. 11, 12, 13 and 14. Thence I run S. 89° 51' W. on a true line bet. secs. 11 and 14: Ascend on E. slope of sandridge; in sandy-gravelly and stony soil; through dense greasewood and cactus undergrowth, and scattering iron wood.
8.50	Trail bears N. and S.
16.50	Ascend on N. slope of sandridge.

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Subdivisions of T.42 S., R.14 W.-Continued.

Chains.

- 28.40 Wash 4 ft.wide and 4 ft.deep drains N.50 W.
- 30.00 Sandstone butte about 200 ft.long, 70 ft.wide and 10 ft.high, bears S.about 70 lks. A sandstone butte about 120 ft.long, 70 ft.wide and 20 ft.high, bears S.W. about 4.00 chs.dist..
- 34.40 Top of ascent about 100 ft.above the sec.cor., bears N.E.and S.W.; begin descent of sandridges.
- 40.15 Set a red sandstone 30x18x4 ins., 22 ins.in the ground, for 1/4 sec.corner, marked 1/4 on N.face; dug pits 18x18 18x12 ins., E.and W.of stone, 3 ft.dist.; and raised a mound of earth, 3 1/2 ft.base, 1 1/2 ft.high, N.of cor. This cor.is about 50 ft.below where descent begins. Leave dense undergrowth bears N.E.and S.W.; enter scattering greasewood; continue in iron wood.
- 69.90 Foot of sandridge about 150 ft.below the 1/4 sec.cor., bears N.20° E.and S.200 W.; ascend gradually.
- 75.00 Top of sandridge about 25 ft.above the foot of ridge, bears N.20° E.and S.20° W.; descend.
- 78.10 W.foot of sandridge about 30 ft.below the top, bears N. 20° E.and S.20° W.; ascend N.E.slope of sandy, gravelly knoll.
- 80.30 The cor.of secs.10, 11, 14 and 15, which is about 20 ft. above foot of knoll.
Land mountainous and broken sandridges.
Soil, sandy-gravelly and stony; 2nd.and 4th.rate.
No timber.
Dense greasewood and cactus undergrowth on 40.15 chs.
Mountainous land on 80.30 chs.

June 2, 1899: At 2^h 57^m a.m., l.m.t., I set off 370 10' N.on the lat.arc; 22° 16' N.on the decl.arc; and determine a true meridian with the solar, at the cor.of secs.10, 11, 14 and 15.

Thence I run

N.66° E. bet.secs.10 and 11.

Slope of knoll and over rolling Berry. bench; in sandy gravelly, clay and

Subdivisions of T.42 S., R.14 E.-Continued.

- Chains. stony ground; through scattering greasewood and iron wood undergrowth.
- 2.00 Foot of knoll about 25 ft. below the sec. cor., bears N. W. and S. E.
- 13.35 Road from Washington to Virgin City by way of Berry Spring, bears N 80° W. and S. 80° E. ; ascend
- 40.00 Set a volcanic stone 26x14x6 ins., 6 ins. in the ground, and in a mound of stone 14 ins. deep, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Volcanic stone at cor. point prevented setting cor. stone deeper. This cor. is on volcanic bench about 50 ft. below the sec. cor.
- 61.80 Top of almost perpendicular ledges, about 25 ft. above the 1/4 sec. cor., bears N. 40° E. and S. 40° W.; descend abruptly over volcanic ledges.
- 64.26 Foot of ledges about 75 ft. below top, on S. bank of Rio Virgin, bears N. 40° E. and S. 40° W.
Set a yellow sandstone 24x12x8 ins., 18 ins. in the ground for Meander Corner of fractional secs. 10 and 11, marked M.C. on N. face; with 2 grooves on E. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, S. of cor. Pits impracticable.
- 67.00 S. edge of water of Rio Virgin at low water mark, about 250 ft. wide, average about 1 ft. deep, slow current, rocky bottom, muddy fresh water, runs S. 30° W.
- 70.90 N. bank of Rio Virgin. The point for meander cor. falls on a sandstone in place about 20x15 ft. and 6 ft. above ground.
At the exact cor. point I cut a cross 6 ins. long and 1/4 inch deep, marked M.C. on S. and 2 notches on E. side of cross, for Meander cor. of fractional secs. 10 and 11; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, at foot of stone 13 lks. N. of corner point. Impracticable to build mound at the proper distance from the cor. point. Pits impracticable.
Ascend abruptly over volcanic and ledges.
- 76.10 Top of ledges about 150 ft. above Rio Virgin, bears N. 40° E. and S. 40° W.; ascend

Subdivisions of T.42 S., R.14 W.-Continued.

Chains. tain.

80.00

Set a gray sandstone 26x16x5 ins., 20 ins. deep in a mound of stone, for cor. of secs. 2, 3, 10 and 11, marked with 5 notches on S. and 2 notches on E. edges; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Sandstone at cor. point prevented setting cor. stone deeper.

This cor. is about 170 ft. above the Rio Virgin near top of sandstone mountain range which skirts the river. Many specimens of petrified wood are found on this range.

Land mountainous and broken; in river bottom nearly level.

Soil, sandy, gravelly, clay and stony; 3rd. and 4th. rate. No timber.

Mountainous land on 9.10 chs.

June 2, 1899.

N. 89° 51' E. on a random line bet. secs. 2 and 11.

6.94

Set temp. Meander cor. on W. bank of Rio Virgin.

10.51

Set temp. Meander cor. on E. bank of Rio Virgin.

40.00

Set temp. 1/4 sec. cor.

80.26

Intersect N. and S. line 14 lks. S. of cor. of secs. 1, 2, 11 and 12.

Thence I run

S. 89° 45' W. on a true line bet. secs. 2 and 11.

Descend over volcanic, and sandy, stony and gravelly bench, through scattering greasewood and iron wood.

1.20

Trail bears N. 60° W. and S. 60° E.

9.10

Old road and trail bears N. 20° E. and S. 20° W.

14.20

Road from Washington to Berry Spring and Virgin City bears N. 10° W. and S. 10° E.

40.13

Set a black lava stone 26x10x4 ins., 20 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18x12 ins., E. and W. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

This cor. is about 75 ft. below the sec. cor.

Subdivisions of T.42. S., R.14. W.-Continued.

Chains.

- 44.00 Trail bears N.10° W.and S.10° E.
- 66.30 Trail bears N.20° W.and S.20° E.
- 68.87 Top of ledges on E.side of the Rio Virgin about 50 ft.below the 1/4 sec.cor.,bears N.20° E.and S.20° W.; descend abruptly over ledges.
- 69.75 Foot of ledges in river bottom,about 75 ft.below the top of ledges,on E.bank of the Rio Virgin,bears N.20° E.and S.20° W.
Set a lava stone 30x12x5 ins.,23 ins.deep in a mound of stone,for Meander cor.of fractional secs.2 and 11, marked
M.C.on W.face;with 5 grooves on S.face;and raised a mound of stone,2 ft.base,1 1/2 ft.high,E.of cor.
Pits impracticable.Volcanic stone at corner point prevented setting the cor.stone in the ground.
- 72.10 E.edge of the water of the Rio Virgin,near low water mark,now about 110 ft.wide.The current is rapid, with stony bottom,fresh muddy water about 1 foot deep,runs S.20° W.
- 73.32 West bank of Rio Virgin.
Set a yellow sandstone 30x10x5 ins.,23 ins.in the ground,for Meander cor.of fractional secs.2 and 11, marked
M.C.on E.face;with 5 grooves on S.face;dug pits 36x 36x12 ins. 8 ft.W.of stone;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor.
- 74.05 Foot of ledges on the W.side of the river bottom, about 20 ft.above river bed,bears N.20° E.and S.20° W. Ascend abruptly over broken ledges.
- 76.00 Top of ledges about 75 ft.high,bears N.20° E.and S. 20° W.;ascend rapidly over S.E.slope of burnt sand- stone mountain.
- 80.26 The cor.of secs.2,3,10 and 11.
This cor.is about 140 ft.above the bed of the Rio Virgin.
Land,rolling,broken and mountainous.
Soil,stony,sandy and gravelly;4th.and 3rd.rate;in river bottom the soil is sandy-loamy;2nd.and 1st.rate.
No timber.
Mountainous land on 6.94 chs.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.

June 3, 1899: At the cor. of secs. 2, 3, 10 and 11, I set off $22^{\circ} 22'$ N. on the decl. arc; and at 11h 57m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ} 11'$ N.

Knowing from previous re-survey of the N. bdy. of the Tp. that a closing cor. of secs. 2 and 3 will be necessary, I survey the line bet. these secs. as follows:

June 3, 1899: At 2h p.m., l.m.t., I set off $37^{\circ} 11' 20''$ N. on the lat. arc; $22^{\circ} 23'$ N. on the decl. arc; and determine a true meridian with the solar, at the cor. of secs. 2, 3, 10 and 11.

Thence I run

N. $00^{\circ} 6'$ E. bet. secs. 2 and 3.

Ascend on S.E. slope of sandstone mountain; through scattering greasewood and iron wood undergrowth.

17.00 Top of sandstone mountain about 100 ft. above the sec. cor., bears N. 40° E. and S. 40° W.; thence descend on N.W. and N. slope of mountain; over broken ridges and ledges

40.00 On N. slope of steep descent, about 200 ft. below the top of mountain.

Set a yellow sandstone 12x12x8 ins., 8 ins. deep in a mound of stone, for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone 2 ft. base, 1 $1/2$ ft. high, W. of cor. Pits impracticable. Sandstone surface prevented setting the cor. stone deeper.

48.10 Road from Washington to Berry Spring and Virgin City, at foot of mountain in hollow, about 100 ft. below the $1/4$ sec. cor., bears N. 80° E. and S. 80° W.; thence over broken clay and gypsum foot hills with frequent hollows and small washes which drain S.E. to Virgin River.

75.50 Intersect the N. bdy. of the Tp. 4.05 chs. S. $89^{\circ} 57'$ E from the old cor. of secs. 2, 3, 34 and 35, heretofore described.

Set a gray sandstone 20x8x6 ins., 15 ins. in the ground for closing cor. of secs. 2 and 3, marked C.C. on S.; with 2 grooves on E. and 4 grooves on W. faces; and

Subdivisions of T.42 S., R.14 W.-Continued.

Chains. raised a mound of stone 2 ft. base, 1 1/2 ft. high, S. of cor. Pits impracticable.
I destroy the marks on the old cor. pertaining to secs. 2 and 3; and re-mark the stone for cor. of secs. 34 and 35, T.41 S., R.14 W., only.

Land mountainous and broken foot hills.

Soil, stony, clay and gypsum and gravelly; 4th. rate.

No timber.

Mountainous land on 75.50 chs.

June 3, 1899.

June 5, 1899: At 9^h a.m., l.m.t., I set off 37° 7' N. on the lat. arc; 22° 35' N. on the decl. arc; and determine a true meridian with the solar, at the cor. of secs. 3, 4, 33 and 34, on the S. bdy. of the Tp., which I established May 24, 1899. See Book "A".

Thence I run

North 0° 5' E. bet. secs. 33 and 34.

Descend over sandstone ridges; in sandy and stony and rich sandy soil; through scattering greasewood, sage, and cactus undergrowth.

3.00
30.00

Hollow drains N.E.
Begin abrupt descent over sandstone ridges sloping N.W.

40.00

Set a red sandstone 24x24x6 ins., 18 ins. in the ground for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

This cor. is about 150 ft. below the sec. cor. cor.
Descend more gradually.

50.00

Enter dense greasewood, sage and cactus undergrowth, bears N. 100° E. and S. 100° W.; leave scattering undergrowth.

80.00

Set a red sandstone 30x14x6 ins., 23 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, marked with 1 notch on the S. and 3 notches on E. edges; dug pits 18x18x12 ins. in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Subdivisions of T.42. S., R.14. W.-Continued.

Chains.	<p>This cor. is on N.E. slope of sandridges about 75 ft. below the $1/4$ sec. cor.</p> <p>Land mountainous and broken.</p> <p>Soil, sandy, gravelly and stony and rich sandy soil; 3rd., 4th. and 2nd. rate.</p> <p>No timber.</p> <p>Dense greasewood, sage and cactus undergrowth on 30.00 chs.</p> <p>Mountainous land on 80.00 chs.</p>
40.00	<p>East, on a random line bet. secs. 27 and 34.</p> <p>Set temp. $1/4$ sec. cor.</p>
79.98	<p>Intersect N. and S. line 10 lks. N. of cor. of secs. 26, 27, 34 and 35.</p> <p>Thence I run</p> <p>N. $89^{\circ} 56'$ W. on a true line bet. secs. 27 and 34.</p> <p>Ascend gradually over broken sandridges; in sandy gravelly and stony ground; through scattering greasewood, sage and cactus undergrowth.</p>
8.80	<p>Top of sandridge about 25 ft. above the sec. cor. bears bears N. 10° E. and S. 10° W.; descend over sandridges sloping N.W.</p>
39.99	<p>Set a red sandstone 26x18x5 ins., 20 ins. in the ground for $1/4$ sec. cor., marked $1/4$ on N. face; dug pits 18x18x12 ins., E. and W. of stone 3 ft. dist.; and raised a mound of earth, 3 $1/2$ ft. base, 1 $1/2$ ft. high N. of cor. This cor. is about 75 ft. below the top of ridge. Descend into hollow.</p>
46.25	<p>Bottom of hollow about 75 ft. below the $1/4$ sec. cor., drains N. 20° W.; ascend.</p>
48.50	<p>Top of ascent W. side of hollow about 25 ft. above bottom of hollow, bears N. 20° W. and S. 20° E.; descend.</p>
54.70	<p>E. side of hollow about 70 ft. wide and 25 ft. deep, drains N.W.; ascend from hollow.</p>
57.70	<p>W. side of hollow about 30 ft. above the bottom, and trail bears N. 10° E. and S. 10° W.</p>
72.20	<p>Top of ascent about 50 ft. above the hollow, bears N.W. and S.E.; descend.</p>

Subdivisions of T.42 S., R.14.W.-Continued.

Chains.	
74.00	Top of ledges on E.side of chasm about 100 ft.wide and 50 ft.deep,bears N.and S. Head of chasm with perpendicular ledges of sandstone about 150 ft.deep, bears N.about 150 lks.
75.60	Enter dense sage and greasewood undergrowth bears N.and S.;leave scattering undergrowth.
79.98	The cor.of secs.27,28,33 and 34. Land mountainous and broken sandridges. Soil,sandy,gravelly and stony;3rd.and 4th.rate. No timber. Mountainous land on 79.98 chs. June 5,1899:At this cor.I set off $22^{\circ} 36'$ N.on the decl.arc;and,at $11^h 58'$ a.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is $37^{\circ} 8'$ N.
	N. $0^{\circ} 5'$ E.bet.secs.27 and 28. Descend on N.slope over broken sandridges;in sandy stony and sandy-loamy soil;through dense greasewood, and sage undergrowth .
2.20	Top of sandstone ledges about 25 ft.below the $1/4$ sec.cor.,bears N. 80° W.and S. 80° E.about 4.00 chs. to head of chasm. Leave dense undergrowth bears E.and W.;enter scattering sage,greasewood and cactus.
5.70	Bottom of chasm about 100 ft.deep,and wash 14 ft. wide and 6 ft.deep drains N. 80° W.
10.50	Wash in bottom of chasm about 8 ft.wide and 4 ft . deep drains N. 85° W.,and joins main wash at about 5.00 chs.dist.Perpendicular ledges at head of chasm bears E.about 6.00 chs.
11.38	Foot of almost perpendicular ledges on N.side of chasm,abo ut 75 ft.high,bears N. 85° W.and S. 85° E..
11.50	Top of ledges on N.side of chasm;ascend over broken sandstone reefs.
15.00	Top of ascent about 50 ft.above the top of ledges, bears E.and W.;descend over sandridges in sandy, loamy soil;through dense sage,greasewood and cactus

Subdivisions of T.42, S., R.14, W.-Continued.

- Chains. undergrowth and mountain rush; leave scattering undergrowth and sandy gravelly stony ground.
- 40.00 Set a red sandstone 24x12x5 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. About 50 ft. below beginning of descent.
- 80.00 Set a red sandstone 24x14x6 ins., 18 ins. in the ground, for cor. of secs. 21, 22, 27 and 28, marked with 2 notches on S. and 3 notches on E. edges; dug pits 18x18x12 ins., in each sec., 5 $\frac{1}{2}$ ft. dist.; and raised a mound of earth 4 ft. base, 2 ft. high, W. of cor. This cor. is about 75 ft. below the $\frac{1}{4}$ sec. cor. on top of high sandridge. Land mountainous and broken. Soil, sandy, gravelly and stony and sandy-loam; 2nd. 4th. and 1st. rate. No timber. Dense sage, greasewood and cactus undergrowth on 65.00 chs. Mountainous land on 80.00 chs.
-
- S., $89^{\circ} 56'$ E. on a random line bet. secs. 22 and 27.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.92 Intersect N. and S. line 6 lks. S. of cor. of secs. 22, 23, 26 and 27. Thence I run N. $89^{\circ} 59'$ W. on a true line bet. secs. 22 and 27. Ascend gradually over rolling sandhills; in rich sandy loamy soil; through dense sage, greasewood and cactus undergrowth.
- 33.00 Leave rolling sandhills and enter broken sandridges and sandstone reefs, bears N. 300° E. and S. 300° W.. Leave dense undergrowth and enter scattering sage, greasewood and cactus. Leave sandy-loamy soil.
- 34.00 E. foot of S. projection of sandstone butte about 30 ft. high bears S. 200° W. about 15 ft. and extends N. and N.E. about 5.00 chs.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	
35.00	S.W.foot of butte bears S.30° W.about 50 ft.,and extends N.about 5.00 chs.
36.00	Leave scattering undergrowth and enter dense sage, greasewood and cactus undergrowth bears N.30° E.and S.30° W.
39.96	Set a red sandstone 36x20x5 ins.,27 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18 x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor. This cor.is about 100 ft.above the sec.cor. A sandstone butte about 6.00 chs.long N.E.and S.W., and 3.00 chs.wide,150 ft.high,bears N. about 3.00 chs. Enter rich sandy loamy soil bears N.and S.;leave sandy,gravelly and stony soil.
64.40	Trail bears N.70° E. and S.70° W.
79.92	The cor.of secs.21,22,27 and 28. This cor.is about 50 ft.above the 1/4 sec.cor. Land broken sandridges and rolling sandhills. Soil,sandy,gravelly ,stony and rich sandy-loam; 3rd.4th.and 1st.rate. No timber. Dense sage,greasewood and cactus undergrowth on 76.92 chs. Mountainous land on 46.92 chs. When supplied with moisture this land affords good grazing for stock watering at Willow Spring and the Rio Virgin.
	North,0° 5' E.,bet.secs.21 and 22. Descend gradually over sandstone mountain sloping N.E. and E.;in rich sandy-loamy soil;through dense sage,greasewood and cactus undergrowth.
15.00	Foot of descent about 50 ft.below the sec.cor.,bears S.W.and N.E.;ascend.
33.00	Leave dense undergrowth bears E.and W.;enter scatter-sage,greasewood and iron wood.
38.00	Top of sandridge about 40 ft.above the sec.cor.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	bears S.100° E. and N.100° W.; thence descend over top of sandridges; leave sandy loamy soil; enter sandy-stony ground.
40.00	Set a red sandstone 24x14x7 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor. Descend over N.W. slope of sandridges on top of sand stone mountain.
51.75	Top of almost perpendicular ledges about 40 ft. below the 1/4 sec. cor. and about 60 ft. high, bears N.70° E. and S.70° W.; descend abruptly over ledges.
51.85	Foot of ledges bears N.70° E. and S.70° W.; thence descend over broken foot hills.
53.30	Top of ledges about 125 ft. below the 1/4 sec. cor bears N.70° E. and S.70° W.; descend abruptly.
53.50	Foot of ledges about 40 ft. high bears N.60° E. and S.
56.73	Top of sandstone reefs about 150 ft. below the 1/4 sec. cor. bears N.70° E. and S.70° W. Descend abruptly over reefs.
59.00	Foot of sandstone reefs about 75 ft. below the top, bears N.70° E. and S.70° W.
60.00	Begin ascent over broken sandridges in hollow which drains N.70° W. W.W. Roundy's house in river bottom bears W. about 50.00 chs.. Pasture on S. side of river and farm and pasture on N. side of river extends along the river bottom across sec. 21.
66.00	Trail bears N.60° E. and S.60° W.
67.00	Old wagon road bears N.80° E. and S.80° W.
71.80	Top of ascent about 50 ft. above the foot of ascent bears N.80° W. and S.80° E.; descend into hollow.
72.50	Bottom of hollow about 25 ft. deep drains N.80° W. Ascend.
75.50	Top of ascent N. side of hollow, about 50 ft. above bot- tom of hollow bears N.80° W. and S.80° E.; descend gradually over N.E. slope of ridge.
80.00	Set a red sandstone 24x12x10 ins., 18 ins. in the ground, for cor. of secs. 15, 16, 21 and 22, marked 42 S. on N.E., and 14 W., on S.E. faces; with 3 notches on S.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	<p>and E. edges; dug pits 18x18x12 ins., in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor.</p> <p>This cor. is on bench about 300 ft. below the 1/4 sec. corner.</p> <p>Land mountainous and broken.</p> <p>Soil, sandy loam and stony; 1st. and 4th. rate.</p> <p>No timber.</p> <p>Dense greasewood, sage or cactus undergrowth on 33.00 chs.</p> <p>Mountainous land on 80.00 chs.</p> <p style="text-align: right;">June 5, 1899.</p>
40.00	<p>S., 89° 59' E. on a random line bet. secs. 15 and 22.</p> <p>Set temp. 1/4 sec. cor.</p>
79.96	<p>Intersect N. and S. line. 23 lks. N. of the cor. of secs. 14, 15, 22 and 23.</p> <p>Thence I run</p> <p>N. 89° 49' W. on a true line bet. secs. 15 and 22.</p> <p>Ascend on top of sandstone mountain over sandridges; in sandy, stony and gravelly soil; through dense sage greasewood and cactus undergrowth.</p>
10.40	<p>Road from Washington to Canaigara or sour dock grounds in S.E. part of the Tp., bears N. 200° W. and S. 200° E.</p>
38.30	<p>Top of sandridges about 100 ft. above the sec. cor., bears N. 40° E. and S. 40° W.; descend over top of sandstone ridges and reefs; leave dense & enter scattering undergrowth.</p>
39.98	<p>The point for the 1/4 sec. cor. falls on a sandstone reef, which falls rapidly to N. and W.</p> <p>At the exact cor. point I mark a cross 8 ins. long and 1/2 inch deep, with 1/4 on N. side of cross; and at 61 lks. W. of cor. point at foot of reef I raised a mound of stone 2 ft. base, 1 1/2 ft. high. Not practicable to build mound of stone on the N. side of cor. point. Pits impracticable.</p> <p>This cor. is about 75 ft. below the top of sandridges.</p>
46.70	<p>Top of almost perpendicular ledges about 40 ft. high,</p>

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	and about 100 ft. below the 1/4 sec. cor., bears N. about 5.00 chs.; thence N. 70° E.; and S. about 5.00 chs. to head of deep chasm.
47.00	Foot of ledges; bears N. and S.; descend abruptly over rough broken foot hills.
49.60	At head of wash about 10 ft. wide and 15 ft. deep drains N. 60° W.
53.10	Descend more gradually over low ridges.
67.55	Road bears N. 10° E. and S. 10° W.
68.90	Trail bears S. 10° E. and N. 45° W.
70.60	Old road bears N. 40° W. and S. 40° E. and joins main road at a distance of about 15.00 chs. N.
79.96	The cor. of secs. 15, 16, 21 and 22. Land, mountainous and broken. Soil, sandy and stony; 2nd. and 4th. rate. No timber. Dense undergrowth on 38.30 chs. Mountainous land on 79.96 chs.
	N. 0° 5' E. bet. secs. 15 and 16. Over broken ridges near E. side of the Rio Virgin bottom, in sandy gravelly clay and stony soil; through scattering greasewood and iron wood undergrowth.
9.15	Road to Washington from Virgin City by way of Berry Spring, bears W. and N. 45° E.
16.00	Trail bears N. E. and S. W.
19.80	Old stone wall on E. side of river bottom bears N. E. and S. W.
21.00	Foot of volcanic ledges on E. side of river bottom, about 100 ft. below the sec. cor., bears N. E. and S. W.; thence over almost level land in river bottom.
24.00	Begin abrupt ascent over ledges on E. side of river bottom.
25.90	Old stone wall on E. side of pasture bears N. E. and S. W.
25.90	Top of ledges about 80 ft. above the river bottom, bears N. E. and S. W.; descend over volcanic reefs.
27.00	Trail bears S. W. and N. E.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.

- 30.00 Bottom of hollow about 50 ft. below the top of ledges drains N. 80° E.; ascend.
- 31.00 Top of rugged point of ridge, about 50 ft. above the bottom of hollow, bears E. and W.; thence ascend gradually over volcanic bench.
- 40.00 Set a volcanic stone 18x14x10 ins., 12 ins. in the ground for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Descend gradually over N. slope of bench.
- 46.00 Top of volcanic ledges on S. side of river bottom, bears N. 80° E. and S. 80° W.; descend abruptly over ledges.
- 48.00 Foot of volcanic ledges in river bottom about 75 ft. below the 1/4 sec. cor., 40 ft. high, bears N. 80° E. and S. 80° W. Enter dense willow undergrowth.
- 52.00 Set a volcanic stone 18x10x8 ins., 12 ins. in the ground, for meander cor. of fractional secs. 15 and 16, on S. bank of the Rio Virgin, marked N.C. on N. face; with 3 grooves on E. face; dug a pit 36x36x12 ins., 8 ft. S. of stone; and raised a mound of earth, 4 ft. base, 2 ft. high, S. of cor.
- 52.20 Edge of water on S. side of the Rio Virgin at or near low water mark; rapid current, fresh muddy water about 1 ft. deep; sandy bottom, course S. 60° W., about 6.00 chs. to Wm. W. Roundy's and Wallace Pollocks dam at head of their irrigation canal, thence S. 30° W. leave dense willow undergrowth.
- 51.20 Edge of water on N. side of Rio Virgin at low water mark. Enter dense greasewood and willow undergrowth, bears N. 60° E. and S. 60° W.
- 51.33 North bank of the Rio Virgin. Set a gray sandstone 20x10x6 ins., 16 ins. in the ground, for meander cor. of fractional secs. 15 and 16, marked, N.C. on S. face; with 3 grooves on E. face; dug a pit 36x36x12 ins., 8 ft. N. of stone; and raised a mound of earth, 4 ft. base, 2 ft. high, N. of cor.
- 48.00 Foot of burnt sandstone mountain on N. side of river bottom, bears N. 60° E. and S. 80° W.; ascend abruptly on

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	S.slope of mountain; leave ^{dense} greasewood and willow undergrowth and enter scattering greasewood and iron wood.
71.20	Top of burnt sandstone mountain about 200 ft. above the river, bears N.40° E. and S.40° W.; descend abruptly over rough N.W. slope of mountain.
77.00	Foot of mountain about 150 ft. below the top bears N. 40° E. and S.40° W. abrupt descent over broken foot hills.
80.00	Set a gray sandstone 18x10x6 ins., 12 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, marked with 4 notches on S., and 3 notches on E. edges; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
	This cor. is on steep N.W. slope of foot hills about 25 ft. below foot of mountain.
	Land mountainous and broken; and river bottom.
	Soil, sandy and stony on mountain and ridges; 4th. rate.
	In the river bottom the soil is sandy and loamy; 2nd. and 1st. rate.
	No timber, except scattering cottonwood and ash in river bottom.
	Dense greasewood and willow undergrowth on 7.00 chs.
	Mountainous land on 70.00 chs.
	June 6, 1899: At this cor. I set off 22° 42' N. on the decl. arc; and, at 11 ^h 58 ^m , a.m., l.m.t., the sky is suddenly over cast and I am unable to observe the sun on the meridian, and obtain the reading of the lat. arc.
	S.89° 49' E. on a random line bet. secs. 10 and 15.
23.72	Set temp. meander cor. on W. bank of the Rio Virgin.
26.89	Set temp. meander cor. on E. bank of the Rio Virgin.
40.00	Set temp. 1/4 sec. cor.
80.14	Intersect N. and S. line 2 lks. N. of cor. of secs. 10, 11, 14 and 15.
	Thence I run

Subdivisions of T.42 S., R.14 W.-Continued.

- Chains. N. $89^{\circ} 48'$ W. on a true line bet. secs. 10 and 15. .
 Descend over broken volcanic and sandstone ridges;
 in sandy, gravelly and stony ground; through scatter-
 ing greasewood and iron wood undergrowth.
- 18.70 Trail in bottom of hollow which drains S. 200° W.,
 about 40 ft. below the sec. cor. . .
- 29.00 Road from Washington to Berry Spring and Virgin City
 at foot of descent about 100 ft. below the sec. cor.,
 bears S. 70° W. and N. 70° E. ; ascend gradually.
- 40.07 Set a red sandstone 26x8x5 ins., 20 ins. in the ground,
 for $1/4$ sec. cor., marked $1/4$ on N. face; dug pits 18x18
 x12 ins., E. and W. of stone, 3 ft. dist.; and raised a
 mound of earth, 3 $1/2$ ft. base, 1 $1/2$ ft. high, N. of cor.
 Descend gradually.
- 42.50 Trail bears N. and S. .
- 50.55 Top of volcanic ledges E. side of river bottom, about
 25 ft. below the last $1/4$ sec. cor., bears N. 300° E. and S.
 300° W.; descend abruptly over broken ledges into
 river bottom.
- 51.85 Foot of ledges in river bottom about 35 ft. high,
 bears N. 200° E. and S. 200° W.
- 53.25 E. bank of the Rio Virgin; set a lava stone 36x12x4
 ins., 27 ins. in the ground, for meander cor. of fractional
 secs. 10 and 15, marked
 M.C. on W. face; with 4 grooves on S. face; dug a pit
 36x36x12 ins., 8 ft. E. of stone; and raised a mound of
 earth, 4 ft. base, 2 ft. high, E. of cor.
- 54.00 E. edge of waters of the Rio Virgin at or near low
 water mark, about 160 ft. wide, rapid current, fresh
 muddy water, rocky bottom, about 9 ins. deep, course S.
 200° W.
- 56.42 West bank of the Rio Virgin; set a gray sandstone
 36x12x6 ins., 27 ins. in the ground, for meander cor. of
 fractional secs. 10 and 15, marked
 M.C. on E. face; with 4 grooves on S. face; and raised a
 mound of stone, 2 ft. base, 1 $1/2$ ft. high, N. of cor.
 Mound could not be built on W. of stone on account of
 a large boulder at the proper place for the mound.
 Ascend abruptly over boulders in river bottom.
 Pits impracticable.
- 57.40 Foot of almost perpendicular ledges about 25 ft. high,
 and about 20 ft. above the river bottom, bears N. 200° E.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	and S.20° W.; ascend abruptly over ledges.
57.60	Top of ledges bears N.20° E. and S.25° W.; thence ascend abruptly over S.E. slope of sandstone mountain.
75.00	Top of sandstone mountain about 175 ft. above the river bottom, bears N.30° E. and S.30° W.; thence descend very abruptly over broken ledges on N.W. slope of mountain.
80.14	The cor. of sec. 9, 10, 15 and 16. This cor. is about 175 ft. below the top of mountain. On this range is found abundant specimens of petrified wood and conglomerates made up of all kinds of small stones and gravel, indicating that it was once covered with water. Land mountainous and broken, and river bottom. Soil on mountain and ridges sandy, gravelly and stony; 3rd. and 4th. rates; in river bottom rich sandy and gravelly; 2nd. rate. No timber, except scattering cotton wood in river bottom. Mountainous land on 54.00 chs.

June 6, 1893: At 3h 58m p.m., l.m.t., I set off 37° 10' N. on the 1st. arc; 22° 44' N. on the decl. arc; and determine a true meridian with the solar, at the cor. of secs. 9, 10, 15 and 16.

Thence I run

N. 0° 5' E. bet. secs. 9 and 10.

Descend abruptly over broken N.W. slope of foot hills; through scattering greasewood and iron wood undergrowth in sandy, clay and stony ground.

0.20 Sharp hollow or ravine, about 15 ft. below the sec. cor. drains S. 70° W. and enters the Rio Virgin near the Roundy-Pollock dam; ascend abruptly on S. slope of ridge.

2.80 Top of ridge or spur of mountain about 75 ft. high, bears N. 70° E. and S. 70° W.

5.30 Sandstone ridge at top of ascent about 100 ft. above the sec. cor., bears N. 40° E. and S. 20° W.; descend

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	abruptly over N.W.slope of ridge.
6.00	Foot of sandridge about 40 ft.below the top bears N.E.and S.W.;thence descend over broken clay and gypsum foot hills,with frequent washes and hollows, which drain N.W.
32.00	Foot of clay and gypsum foot hills,about 100 ft. below the last sec.cor.,bears N.60° E.and S.60° W.; thence over almost level valley.
40.00	Set a yellow sandstone 18x6x6 ins.,12 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N. and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, W.of cor.
80.00	Set a white lime stone 24x10x7 ins.,18 ins.in the ground,for cor.of secs.9 and 10,marked with 5 notches on S. and 3 notches on E.edges;dug pits 24x24x12 ins. in each sec.,6 ft.dist.;and raised a mound of earth 4 ft.base,2 ft.high,S.of cor.
	Land,mountainous,broken,and level.
	Soil, ^{sandy} stony,clay and gypsum on ridges and foot hills; 3rd.and 4th.rate.In the valley clay,slightly intermixed with gravel;2nd.rate.
	No timber.
	Mountainous land on 32.00 chs.

June 6,1899.

	S.89° 48' E.on a random line bet.secs.3 and 10.
40.00	Set temp.1/4 sec.cor.
80.30	Intersect N.and S.line 5 lks.N.of cor.of secs.2,3,10 and 11.

June 7,1899:At this cor.I set off 37° 11' N. on the lat.arc;22° 47' 30" N.on the decl.arc;and at 9^h a.m.,l.m.t.,determine a true meridian with the solar.

Thence I run

N.89° 46' W.on a true line bet.secs.3 and 10.

Ascend abruptly on E.slope of sandstone mountain; through scattering greasewood and iron wood under-

Subdivisions of T.42. S., R.14. W.-Continued.

Chains. growth.

16.20 Top of mountain about 200 ft.above the last sec.cor., bears N.100° E.and S.100° W.;descend abruptly over broken ledges on N.W.slope of mountain.

23.00 Wash in bottom of hollow at foot of mountain,about 150 ft.below the top of mountain,20 ft.wide and 5 feet deep,drains N.200° W.;thence descend over broken clay and gypsum foot hills.

40.15 Set a red sandstone 24x8x5 ins.,18 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18 x12 ins.E.and W.of stone ,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor. This cor.is in clay and gypsum foot hills about 200 feet below the top of mountain.

47.00 Leave broken clay and gypsum foot hills about 25 ft. below the 1/4 sec.cor.,bears N.60° E.and S.60° W.; gradually descend over almost level clay valley.

80.30 The cor.of secs.3,4,9 and 10.

147.00 This cor.is about 25 ft.below the foot hills.

33.30 Land mountainous and broken,and almost level valley. Soil,stony clay ,gypsum and gravelly on mountain and foot hills;4th.rate; in the valley;rich clay slightly intermixed with gravel and suitable for farming purposes;2nd.rate.

No timber.

Mountainous land on 47.00 chs.

The 1/4 sec.cor .bet.secs.3 and 4 is a white sandstone 14x12x4 ins.,marked 1/4 on W.face.I restore pits and mound as follows:
dug pits 18x18x12 ins.,N.and S.of stone 3 ft.dist.; and raised a mound of earth 3 1/2 ft.base,1 1/2 ft. high,W.of cor.

From this cor.I run

S.0°05'W.on a random line bet.secs.3 and 4.

34.98 Intersect the E.and W.line 5.61 chs.,S.89°48' W.of cor.of secs.9 and 10.

Set a limestone 15x7x6 ins.,10 ins.in the ground,

Subdivisions of T.42. S., R.14. W.-Continued.

Chains: for closing cor. of secs. 3 and 4, marked C.C. on N. face; with 3 grooves on E. and 1 groove on N. face; dug pits 24x18x12 ins. crosswise on each line E. and W., 3 ft., and N. of stone 7 ft. dist.; and raised a mound of earth 4 ft. base, 2 ft. high, N. of cor.

June 7, 1899: At this cor. I set off 220° 48' N. on the decl. arc; and, at 11^h 59^m, a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 11' N.

Thence I run N. 0° 05' E.

On a true line bet. secs. 3 and 4.

Ascend gradually over almost level land; in clay gravelly soil; through scattering greasewood and iron wood undergrowth.

17.00 Foot of clay and gypsum foot hills about 25 ft. above the closing cor., bears N. 80° E. and S. 80° W.; leave clay, gravelly soil; enter gypsum-clay and stony ground. Ascend over broken foot hills.

34.98 The 1/4 sec. cor. on E. bdy. of sec. 4, which I establish as the 1/4 cor. of sec. 4 only; thence I continue measurement N. 00° 34' W.

40.00 Set a burnt sandstone 16x10x8 ins., 11 ins. in the ground, for 1/4 sec. cor. of sec. 3, on W. bdy. of sec., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

Pits impracticable.

This cor. is at foot of sandstone ridge on S. slope, which bears N.E. and S.W., about 100 ft. above the closing sec. cor.

Land, broken foot hills, and almost level valley. Soil, clay and gravelly in valley; 2nd. rate; on foot hills; clay-gypsum and stony; 4th. rate.

No timber.

Mountainous land on 23.00 chs.

June 7, 1899.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.

June 8, 1899: At 9h a.m., l.m.t., I set off 370 7' N. on the lat. arc; 220 53' N. on the decl. arc; and determine a true meridian with the solar at the cor. of secs. 4, 5, 32 and 33, on S. bdy. of Tp., established by me May 24, 1899, see notes of book "A",

Thence I run

North, 00 4' E., bet. secs. 32 and 33.

Descend over sandy, gravelly sandstone ridge, sloping N. and N.W.; through scattering greasewood, sage and iron wood undergrowth.

36.00 Top of ledges about 200 ft. below the sec. cor., bears N. 20° E. and S. 20° W.; descend abruptly over broken ledges on N.W. slope.

40.00 On broken ledges about 300 ft. below the sec. cor. Set a gray sandstone 20x12x4 ins., 15 ins. deep in a mound of stone, for 1/4 sec. cor., marked 1/4 on w. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Sandstone prevented setting the cor. stone deeper.

42.04 Top of almost perpendicular ledges about 125 ft. high, and 25 ft. below the 1/4 sec. cor., bears N. 10° E. and S. 10° W.; descend abruptly over ledges.

45.00 Foot of ledges bears N. 10° E. and S. 10° W.; thence over broken foot hills sloping N.W., along the W. foot of ledges.

78.40 Ravine at W. foot of perpendicular ledges, about 200 ft. high, 10 ft. wide and 10 ft. deep, drains W. 2.00 chs., thence N.W.; ascend from ravine.

80.00 On S.W. slope of spur of main ridge about 30 ft. above the ravine, and 230 ft. below the 1/4 sec. cor. Set a red sandstone 22x10x6 ins., 17 ins. in the ground, for cor. of secs. 28, 29, 32 and 33, marked with 1 notch on S. and 4 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

Land mountainous and broken.

Soil, sandy, gravelly and stony; 3rd. and 4th. rate.

No timber.

Mountainous land on 80.00 chs.

Top of mountain and foot hills afford good grazing

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	when supplied with moisture.
	E. on a random line bet. secs. 28 and 33.
40.00	Set temp. $1/4$ sec. cor.
80.06	Intersect N. and S. line 6 lks. S. of cor. of secs. 27, 28, 33 and 34.
	Thence I run
	S. $89^{\circ} 57'$ W. on a true line bet. secs. 28 and 33.
	Ascend over sandridge; in rich sandy soil; through dense sage, greasewood and cactus undergrowth.
17.76	Top of sandridge about 50 ft. above the sec. cor. bears N. 100° E. and S. 100° W.; descend.
27.50	Hollow about 2.00 chs. wide and 25 ft. deep, course, N. 100° E. about 20.00 chs. and opens into a deep gulch;; ascend.
34.10	Top of sandridge about 100 ft. above the hollow. bears N. and S.; descend.
37.00	Enter sandstone ledges and reefs about 120 ft. above the sec. cor., bears N. and S.; leave dense and enter scattering undergrowth; leave rich sandy soil. Descend abruptly over ledges.
38.10	W. foot of ledges about 25 ft. high, bears N. and S.
40.03	Set a red sandstone $20 \times 12 \times 5$ ins., 15 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; dug pits $16 \times 18 \times 12$ ins., E. and W. of stone, 3 ft. dist.; and raised a mound of earth, $3 \frac{1}{2}$ ft. base, $1 \frac{1}{2}$ ft. high, N. of cor. This cor. is about 25 ft. below the foot of ledges.
40.36	Bottom of hollow about 25 ft. below the $1/4$ sec. cor., drains N.; ascend.
46.00	Ravine 4.06 chs. wide and 30 ft. deep, with sandstone walls on either side, heads about 5.00 chs. S., course N. 30° E. about 2.00 chs., thence N. 60° W.
50.06	Ascend abruptly over ledges on W. side of ravine.
59.66	Top of almost perpendicular ledges about 100 ft. above the $1/4$ sec. cor. bears N. 300° E. and S. 300° W.; descend abruptly over ledges.
60.06	Foot of ledges about 25 ft. below the top, bears N. 300° E. and S. 300° W.; descend abruptly.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	
70.06	Top of perpendicular ledges about 25 ft. high, bears N. 30° E. and S. 30° W.; descend abruptly.
74.86	Top of almost perpendicular ledges about 50 ft. high, bears N. and S.
75.06	W. foot of ledges bears N. and S.; thence descend over very steep W. slope of sandstone mountain.
80.06	The cor. of secs. 28, 29, 32 and 33, at W. foot of sandstone mountain about 200 ft. high. Land mountainous and broken. Soil, rich sandy, and sandy stony; 2nd. and 4th. rate. No timber. Dense undergrowth on 37.00 chs. Mountainous land on 80.06 chs. June 8, 1899: At this cor. I set off $22^{\circ} 53' 30''$ N. on the decl. arc; and at $11^h 59'$ a.m., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ} 8' N.$
	N. $0^{\circ} 4'$ E. bet. secs. 28 and 29. Ascend on W. slope of steep foot hills, in sandy stony ground; through scattering greasewood, sage, cactus and iron wood undergrowth.
2.20	Top of spur of ridge about 40 ft. above the sec. cor., bears S. 80° E. and N. 80° W.; thence descend rapidly over broken sandy, clay and gypsum foot hills, with frequent small washes and hollows, which drain W. N.W., and S.W.
23.00	Main wash in bottom of hollow, about 20 ft. wide and 10 ft. deep, drains W.
34.50	Wash about 30 ft. wide and 6 ft. deep, drains S. 85° W.
35.80	Trail bears N. 85° E. and S. 85° W.
40.00	Set a red sandstone $24 \times 10 \times 8$ ins., 18 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; dug pits $18 \times 18 \times 12$ ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, $3 \frac{1}{2}$ ft. base, $1 \frac{1}{2}$ ft. high, W. of cor. This cor. is on foot hills sloping W. and N.W. about 150 ft. below the sec. cor.
46.70	Trail bears S. 70° W. and N. 70° E.

Subdivisions of T.42 S.; R.14 W.-Continued.

Chains.

- 52.48 On sandstone reefs about 50 ft. below the $\frac{1}{4}$ sec. cor. bears N.E. and S.W.; descend abruptly over N.W. slope of reefs.
- 56.20 Ravine about 10 ft. wide and 8 ft. deep, drains N. 200° E. and joins main ravine about 3.00 chs. dist.
- 61.00 Foot of sandstone reefs, about 75 ft. below the top bears N.E. and S.W.; thence descend more gradually over W. and N.W. slope of low foot hills.
- 63.00 Main wash about 10 ft. wide and 6 ft. deep, drains N. 200° W. into Fort Pierce Wash
- 79.80 Fort Pierce wash about 50 ft. wide and 6 ft. deep, drains N. 200° E., and N. to river. Road in bottom.
- 80.00 Set a yellow sandstone $26 \times 12 \times 5$ ins., 20 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, marked with 2 notches on S. and 4 notches on E. edges; and raised a mound of stone, 4 ft. base, 2 ft. high, W. of cor.
- It is unsafe to dig pits in the wash. The mound of stone being larger than usual size is sufficient as witness mound in the wash.
- Land mountainous and low foot hills.
- Soil, sandy, gravelly and stony; 3rd. and 4th. rate.
- No timber.
- Mountainous land on 61.00 chs.
- Bunch grass and underbrush grows abundantly on foot hills when supplied with moisture.
-
- N. $89^{\circ} 57'$ E. on a random line bet. secs. 21 and 28.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.96 Intersect N. and S. line 16 lks. S. of cor. of secs. 21, 22, 27 and 28.
- Thence I run
- S. $89^{\circ} 50'$ W. on a true line bet. secs. 21 and 28.
- Ascend gradually over sandy stony ground; through dense sage and greasewood undergrowth.
- 13.00 Top of sandridge about 40 ft. above the sec. cor., bears N. and S.; descend.
- 20.00 Bottom of hollow about 25 ft. below the top of sand-

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	ridge drains N.; ascend.
21.50	Top of ascent about 25 ft. above the hollow, bears N. and S.; descend.
33.50	Top of red sandstone bluff about 100 ft. below the sec. cor.; bears N. 100° E. and S. 100° W.; thence descend abruptly over broken sandstone ledges on W. slope of bluff. A small spring in the bottom of a deep ravine which drains N. 70° W., bears S. about 12.00 chs. dist. Leave dense undergrowth and enter scattering greasewood wood and iron wood undergrowth.
39.98	Set a red sandstone 24x12 x6 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. This cor. is near foot of broken ledges on steep W. slope about 225 ft. below the sec. cor.
50.00	Ravine in bottom of hollow at foot of sandstone bluff about 125 ft. below the 1/4 sec. cor., 10 ft. wide and 6 ft. deep, drains N. 70° W., and opens out in river bottom. S. 70° E. about 2. and 6. chs. dist. are small springs in the ravine.
51.00	Point of sandridge 25 ft. above the ravine, bears N. 60° E. and S. 60° W.; descend.
54.60	Trail bears N. 100° E. and S. 100° W.
55.70	Ravine in bottom of hollow, about 50 ft. below point of ridge, drains N. 100° E.; ascend on N. E. slope of ridge.
59.15	Top of point of ridge about 40 ft. above the ravine, bears N. 60° E. and S. 60° W. descend gradually.
61.50	Top of almost perpendicular ledges about 50 ft. high, bears N. 300° E. and S. 300° W.; descend abruptly over ledges.
61.60	Foot of ledges bears N. 300° E. and S. 300° W. Stone pasture fence bears N. 300° E. and S. 300° W.
66.50	Enter river bottom and pasture at foot of mountain, about 250 ft. below the 1/4 sec. cor., bears N. E. and S. W. Old irrigation ditch, now dry, about 3 ft. wide and 2 ft. deep, drains S. W.; thence over level bottom land, in Wallace Pollock's and W. W. Roundy's pasture; through scattering willow and cotton wood undergrowth and

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	leave scattering greasewood and iron wood.
70.00	A black willow 10 ins.in diameter,bears N.of line about 10 lks.
72.50	Old irrigation ditch about 3 ft.wide and 2 ft.deep, now dry,drains S.30° W.
74.50	W.line of Roundy's and Pollock's pasture fence; bears N.30° W.about 15.00 chs.to head of Washington canal and dam;and S.30° E.about 12.00 chs.to foot of ledges.Leave pasture and descend gradually over sandy gravelly ground sloping N.W.and W.
79.00	Fort Pierce wash about 50 ft.wide and 6 ft.deep, drains N.40° E.about 1.00 ch; thence N.10° W.
79.10	Road in Fort Pierce wash bears S.40° W.and N.10° W.
79.96	The cor.of secs.20,21,28 and 29.
66.50 13.46	Land mountainous and broken,and almost level river bottom.
	Soil,sandy and stony on mountains and ridges;2nd.and 4th.rate;in the river bottom sandy and loamy with slight intermixture of gravel,-1st.and 2nd.rate.
	Scattering black willow,cottonwood and ash in river bottom.
	Dense undergrowth on 29.50 chs.
	Mountainous land on 66.50 chs.
	Canaigara root grows along the foot hills in river bottom.

June 8,1899.

June 9,1899:At 9h a.m.,1.m.t.,I set off 370 04' N. on the lat.arc;220 58' N.on the decl.arc;and determine with the solar a true meridian,at the cor.of secs. 20,21,28 and 29.

Thence I run

N.0° 4' E.bet.secs.20 and 21.

Descend gradually over sandy and stony ground,in Fort Pierce canon,along the E.foot of sandstone mountain.

10.75 Cross brush and stone dam built for protection of main dam against freshets from Fort Pierce wash.

Subdivisions of T.42 S., R.14 W., -Continued.

Chains.

- I4.60 Mouth of tunnel at head of the Washington canal on S. side of dam, cut in solid sandstone, about 12 ft. wide and 10 ft. deep, water about 5 ft. deep, runs N.85° W. through tunnel.
At 24.00 chs. the point for meander cor. on S. bank of Rio Virgin falls in a sluice ditch from the canal, and cannot be set.
- I4.90 Point for witness cor. for meander cor. on S. bank of Rio Virgin, falls on N. side of a projecting sandstone, 14 ft. long E. and W. by 8 ft. wide N. and S., and about 10 ft. above ground. I cut a cross at the point for witness cor., 8 ins. long, 1/2 inch deep, on N. side of stone, for witness to meander cor. fractional secs. 20 and 21, marked
W.C. above the cross; M.C. on N. side of cross; with 4 grooves E. side of cross; and raised a mound of stone 4 ft. base, 2 ft. high, N. side of stone 3 ft. dist. from W.C. point, on top of the Washington dam.
- I5.00 Washington dam, about 400 ft. long, 25 ft. wide and 20 ft. high, with spill cut in solid stone on N. side of dam, constructed at a cost of about \$15,000.00, bears N.30° E.
Wallace Pollock's house bears N.30° E. 25.00 chs. dist. Corral and stables etc. adjoining his house on the E.
- I5.30 Foot of dam and enter river bottom and pasture claimed by Wallace Pollock.
- 24.00 Point for the meander corner, S. bank of the Rio Virgin.
- 23.40 Road in river bottom bears N.80° E. and S.80° W.
- 26.40 S. edge of water of the Rio Virgin at low water mark, about 100 ft. wide and 6 ins. deep, at foot of spill, slow current, sandy bottom, fresh but muddy water, runs N.80° W.
- 30.40 Point for meander cor. on N. bank of the Rio Virgin, falls on changeable bank under irrigation canal and cannot be set.
- 31.70 Irrigation canal leading from Washington dam to Wilkins and Prince's farms and pastures, about 6 ft. wide and 2 ft. deep, filled with water, runs N.85° W.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	
31.95	Row of cottonwood trees bears N.85° W. and S.85° E. Ascend.
32.40	Set a yellow sandstone 20x16x6 ins., 15 ins. in the ground, for witness cor. to meander cor. of fractional secs. 20 and 21, already designated at 30.40 chs. N. of cor. of secs. 20, 21, 28 and 29, marked W.C. and M.C. on S. face; with 4 grooves on E. face; dug a pit 36x36x12 ins., 8 ft. N. of stone; and raised a mound of earth, 4 ft. base, 2 ft. high, N. of cor.
33.00	Top of bench on N. side of river bottom, about 75 ft. above the river, bears N.80° W. and S.80° E. Road from Washington to Virgin City by way of Berry Spring, bears N.80° W. and S.80° E.; thence over rolling and broken bench land, with drainage N.W. and S.W. toward the Virgin River.
37.70	Road from Washington to Virgin City bears E. and W..
40.00	Set a white limestone 24x12x3 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor. This cor. is about 80 ft. above the river bottom.
44.00	Road from Washington to Virgin City by way of Berry Spring, bears N.60° W. and S.60° E.
57.70	Top of ascent about 75 ft. above the 1/4 sec. cor., bears E. and W.; descend.
73.70	Enter clay bottom at foot of bench, about 50 ft. below the 1/4 sec. cor.; bears N.80° W. and S.80° E.; thence over nearly level land.
78.92	S. bank of wash about 50 ft. wide and 10 ft. deep, drains S.70° W., and enters river bottom at about 75.00 chs. dist.
80.00	Set a blue limestone 20x7x6 ins., 15 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, marked with 3 notches on S., and 4 notches on E. edges; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Land rolling and broken on bench, nearly level on N. side of bench and in river bottom. Soil, in river bottom rich and sandy with some gravel.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	on bench and N.foot of bench,sandy,gravelly and clay; 2nd.and 3rd.rate. Black willow cotton wood and ash in the river bottom. Willow undergrowth in river bottom;scattering sage greasewood and iron wood on the low hills and benches.
	North,89° 50' E.on a random line bet.secs.16 and 21.
40.00	Set temp.1/4 sec.cor.
55.14	Set temp.Meander cor.on W.bank of Rio Virgin.
61.32	Set temp.Meander cor.on E.bank of Rio Virgin.
79.84	Intersect N.and S.line 30 lks.S.of cor.of secs.15, 16,21 and 22. Thence I run S.89° 37' W.on a true line bet.secs.16 and 21. Ascend over sandy stony ground on low broken foot hi hills;through scattering greasewood undergrowth.
2.00	Top of ascent about 20 ft.above the sec.cor.,bears N.and S.;descend.
5.40	Trail bears N.30° E.and S.30° W.
6.70	Top of ledges on E.side of river bottom,about 40 ft. high and 50 ft.below the sec.cor.,bears N.10° E.and S.10° W.;descend abruptly over ledges.
7.00	Foot of ledges in river bottom bears N.10° E.and S. 10° W.;enter W.W.Roundy's pasture.
7.35	Descend bank 10 ft.high;thence over level bottom land in sandy,clay and loamy soil;leave scattering undergrowth and enter dense willows bears N.and S.
18.52	Set a gray sandstone 30x12x8.ins.,23 ins.in the ground,for Meander cor.of fractional secs.16 and 21, marked M.C.on W.face;with 3 grooves on S.face;dug pit 36x 36x12 ins.,8 ft.E.of stone;and raised a mound of earth,4 ft.base,2 ft.high,E.of cor. A cottonwood 10 ins.,diam.,bears S.20° E.90 lks. dist.,marked T.42 S.,R.14 W.,S.21,M.C.,B.T.
18.70	Leave dense willows bears N.and S.
21.04	E.edge of the water of the Rio Virgin about 220 ft.

Subdivisions of T.42 S., R.14 W.-Continued.

- Chains. wide at or near low water mark, about 18 ins. deep.
slow current, sandy bottom, runs S. 100° E.
- 26.70 West bank of the Rio Virgin.
Set a gray sandstone 30x9x5 ins., 23 ins. in the ground
for Meander cor. of fractional secs. 16 and 21, marked
M.C. on E. face; with 3 grooves on S. face; dug pit 36x
36x12 ins., 8 ft. W. of stone; and raised a mound of
earth, 4 ft. base, 2 ft. high, W. of cor.
Enter dense willow undergrowth bears N. and S.
- 27.24 Wire fence on E. side of Wm. W. Roundy's field bears S.
30° W., and N. 100° E. about 10.00 chs. to foot of moun-
tain. Enter pasture and field; leave dense willows.
- 30.80 Irrigation ditch about 2 ft. wide and 2 ft. deep runs
S.
- 37.85 Irrigation canal at foot of mountain, about 6 ft. wide
and 3 ft. deep, full of fresh water from the Rio Vir-
gin, runs S. 70° W. along the head of farm.
Fence and row of cotton wood trees on S. bank of canal
canal, bears N. 70° E. and S. 70° W. Leave field & pasture
- 38.00 Begin abrupt ascent of foot of mountain on W. side of
river bottom, over broken sandstone ledges.
- 39.92 Set a gray sandstone 24x11x3 ins., 18 ins. deep in a
mound of stone, for 1/4 sec. cor., marked 1/4 on N.
face; and raised a mound of stone, 2 ft. base, 1 1/2 ft.
high, N. of cor. Pits impracticable. Sandstone pre-
vented setting cor. stone deeper.
This cor. is on S.E. slope of sandstone mountain
about 100 ft. above the river bottom at foot of moun-
tain.
William W. Roundy's house with corralls, stackyards,
stables adjoining same on the E., bears S. 50° W.
about 25.00 chs. dist.
- 44.50 Top of sandstone mountain, about 50 ft. above the 1/4
sec. cor., bears N. 70° E. and S. 70° W.; thence descend
over abrupt N.W. slope.
- 46.50 Foot of main ridge about 75 ft. below the top, bears
N.E. and S.W.; descend over broken ridge.
- 51.74 Foot of broken ridge about 25 ft. below foot of
main ridge, bears N.E. and S.W. and parallels main ridge
Thence ascend on E. slope.
- 54.50 Top of ridge about 50 ft. above the foot, bears N. 30° E.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	and S.300 W.;descend.
55.80	Foot of ridge about 50 ft.below the top,bears N.300 E.and S.300 W.;thence descend over broken clay and gypsum foot hills.
75.34	West foot of clay and gypsum foot hills,about 150 ft.below the top of sandstone mountain designated on the line at 44.50 chs.,bears N.700 E.and S.700 W. Thence over almost level land,gradually descending to W.
78.80	Wash about 60 ft.wide and 15 ft.deep,drains S.700 W.
79.84	The cor.of secs.16,17,20 and 21.
36.95 42.89 de J	This cor.is on the W.side of wash about 175 ft.below the top of mountain which skirts the Rio Virgin.
	Land mountainous,broken and almost level.
	Soil,on the low hills E.of river,sandy,gravelly and stony;2nd.and 4th.rate. In the river bottom and in the farm rich sandy-clay loam,with indications of alkali on E.side of river;1st.rate.Clay,stone and gypsum on ridges and foot hills W.of the river;4th. rate.
	No timber,except scattering cottonwood and black willow in river bottom.
	Dense willow undergrowth on 12.45 [✓] chs.
	Mountainous land on 24.50 [✓] chs.
	The low hills and the pasture in river bottom afford good grazing.
	June.9,1899:At this cor.of secs.16,17,20 and 21, I set off 220 58' 30" N.on the decl.arc;and at 11 ^h 59 ^m a.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37° 9' N.
	N.00 4' E.,bet.secs.16 and 17.
	Ascend foot of ridge over clay and gravelly soil; through scattering greasewood and iron wood undergrowth.
1.78	Trail bears S.800 W.and N.800 E.
7.60	Top of ridge about 50 ft.above the sec.cor.,bears N. 600 E.and S.600 W.;descend on N.W.slope of ridge.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	
10.60	Wash at foot of ridge, about 40 ft. below the top, 25 ft. wide and six ft. deep, drains S.E. and joins main wash at about 4.00 chs. dist. Trail in wash bears S. 200° E. and N. 200° W.; ascend S.E. slope of limestone ridge.
14.10	Top of limestone ridge about 50 ft. above the wash, bears N. 300° E. and S. 300° W.; descend on N.W. slope of ridge.
16.40	Wash at foot of ridge about 25 ft. below the top, about 8 ft. wide and 4 ft. deep, drains S. 300° W., and joins last named wash at about 3.00 chs. dist.; ascend
30.60	S.E. foot of main ridge about 75 ft. above the sec. cor. bears N. 300° E. and S. 300° W.; ascend rapidly on S.E. slope.
40.00	Set a white limestone 20x15x5 ins., 15 ins. deep in a mound of stone, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Limestone surface prevented setting cor. stone deeper. This cor. is on S.E. slope of limestone mountain about 150 ft. above the sec. cor.
43.00	Top of limestone ridge or mountain, about 50 ft. above the 1/4 sec. cor., bears N. 200° E. and S. 200° W.; descend rapidly over N.W. slope.
52.00	Wash at foot of mountain about 50 ft. below the top, 8 ft. wide and 4 ft. deep, drains S. 400° W.; ascend S.E. slope of ridge.
61.00	Top of ridge, about 75 ft. high, bears N. 300° E. and S. 300° W.; descend on N.W. slope of ridge.
80.00	North foot of ridge about 75 ft. below the top bears N. 300° E. and S. 300° W. Set a gray limestone 20x10x6 ins., 15 ins. in the ground, for cor. of secs. 8, 9, 16 and 17, marked with 4 notches on S. and E. edges; dug pits 18x18x12 ins. in each sec., 5 1/2 ft. dist.; and raised a mound of earth 4 ft. base, 2 ft. high, W. of cor. Land mountainous and broken. Soil, clay, gravelly and stony; 4th. rate. Limestone on ridges N. and S. of 1/4 sec. cor. No timber. Mountainous land on 80.00 chs.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.

N.89° 37' E.on a random line bet.secs.9 and I6.

40.00 Set temp.I/4 sec.cor.

79.74 Intersect N.and S.line 26 lks.N.of cor.of secs.9,
I0,I5 and I6.

Thence I run

S.89° 48' W.on a true line bet.secs.9 and I6.

Over broken ridges and clay-gypsum foot hills;
through scattering greasewood and iron wood un der-
growth. Descend abruptly.

0.50 Bottom of sharp hollow at foot of mountain about
20 ft.below the sec.cor.,drains S.80° W.to Rio Vir-
gin;ascend on S.E.slope of ridge.

2.35 Top of white sandstone ridge about 75 ft.high,bears
N.40° E.and S.40° W.;descend on N.W.slope of ridge.

4.00 N.W.foot of sandstone ridge about 50 ft.below the
top of ridge,bears N.30° E.and S.30° W.;descend over
broken clay and gypsum foot hills,generally sloping
Southwesterly.

21.00 Foot of clay and gypsum foot hills about 50 ft.
below the foot of sandstone ridge,bears N.40° E.and
S.40° W.;descend gradually over clay bottom.

29.50 S.E.foot of clay and gypsum foot hills,bears N.20°
E.and S.20° W.

36.50 Wall of limestone about 20 ft.high bears N.30° E.
and S.30° W..descend.

37.30 Wash at foot of ridge(limestone),about 10 ft.wide
and 10 ft.deep,drains S.20° W.;ascend.

39.87 Set a blue limestone 20x10x4 ins.,I5 ins.in the
ground,for I/4 sec.cor.,marked I/4 on N.face; dug
pits 18x18x12 ins.,E.and W.of stone,3 ft.dist.;and
raised a mound of earth,3 I/2 ft.base,I I/2 ft.high,
N.of cor.

51.29 Top of limestone mountain about 250 ft.above the I/4
sec.cor.,bears N.30° E.and S.30° W.;thence descend
abruptly over N.W.slope.

55.00 Bottom of hollow at foot of mountain about 75 ft.
below the top of mountain,heads N.20° E.;ascend
rapidly on S.E.slope of ridge.

63.00 Top of ridge about 100 ft.high,bears N.30° E.and S.
30° W.;descend over N.W.slope of ridge.

Subdivisions of T.42 S., R.14 W.-Continued..

Chains.

71.00 Foot of ridge about 200 ft. below the top, bears N.30° E. and S.30° W.; descend gradually over clay gravelly foot hills.

79.74 The cor. of secs. 8, 9, 16 and 17.

Land mountainous and broken, and nearly level land.

Soil, clay, gravelly, sandy, gypsum and stony; 3rd. and 4th. rate.

No timber.

Undergrowth, greasewood and iron wood.

Mountainous land on 62.50 chs.

June 9, 1899.

June 10, 1899: At 9^h, a.m. l.m.t., I set off 37° 10' N. on the lat. arc; 23° 3' N. on the decl. arc; and determine a true meridian with the solar, at the cor. of secs. 8, 9, 16 and 17.

Thence I run

N.00 4' E. bet. secs. 8 and 9.

Ascend gradually over foot hills, in gravelly soil, through scattering iron wood and greasewood undergrowth.

12.00 Limestone reef about 15 ft. above the sec. cor., bears N.E. and S.W.; descend.

15.90 Road from Washington to Berry Spring and Virgin City at foot of limestone reef, bears N.50° E. and S.50° W.

18.25 Foot of descent, about 20 ft. below limestone reef. Wash 6 ft. wide and 4 ft. deep, drains S.30° W.; ascend.

26.50 Foot of ridge about 15 ft. above the wash, bears N.30° E. and S.30° W.; ascend S.E. slope of ridge.

27.20 Top of ridge about 20 ft. high, bears N.30° E. and S.30° W.; descend N.W. slope of ridge.

27.80 Foot of ridge about 20 ft. below the top, bears N.30° E. and S.30° W.; ascend gradually.

34.00 Begin ascent of broken clay and gypsum foot hills, about 50 ft. above the sec. cor., bears N.20° E. and S.20° W.

40.00 Set a red sandstone 18x10x6 ins., 12 ins. in the ground

Subdivisions of T.42. S., R.14. W.-Continued.

- Chains. for $\frac{1}{4}$ sec.cor., marked $\frac{1}{4}$ on W.face; dug pits $18 \times 18 \times 12$ ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, $3 \frac{1}{2}$ ft. base, $1 \frac{1}{2}$ ft. high, W. of cor. This cor. is about 100 ft. above the last sec.cor.
- 54.00 S.E. foot of burnt sandstone mountain, about 60 ft. above the $\frac{1}{4}$ sec.cor., bears N. 40° E. and S. 40° W.; ascend abruptly on S.E. slope. Leave gypsum & clay hills
- 64.57 Top of burnt sandstone mountain about 175 ft. above the foot, bears N. 40° E. and S. 40° W.; thence descend abruptly over broken sandstone ledges.
- 69.00 Foot of sandstone mountain about 75 ft. below the top of mountain, bears N. 30° E. and S. 30° W.; descend more gradually.
- 71.00 Wash in bottom of hollow at foot of descent, about 25 ft. below the foot of mountain, about 12 ft. wide and 6 ft. deep, drains W. 3.00 chs., thence S. 20° W. Ascend.
- 71.60 Old road from Washington to Harrisburg bears S. 80° W. 2.00 chs., thence S.W., and N. 80° E.
- 75.60 Top of ascent about 25 ft. above the wash, bears E. and W.; descend gradually.
- 76.70 Old road from Washington to Harrisburg, bears S. 85° W. and N. 85° E.
- 80.00 Set a white limestone $18 \times 12 \times 4$ ins., 12 ins. in the ground, for cor. of secs. 8 and 9 on S. bdy. of sec. 4, marked with 5 notches on the S. and 4 notches on E. edges; and raised a mound of stone 2 ft. base, $1 \frac{1}{2}$ ft. high, S. of cor. Pits impracticable.
- Land mountainous, broken and rolling.
- Soil, clay, gravelly, gypsum and stony; 3rd. and 4th. rate.
- No timber.
- Undergrowth, greasewood and iron wood.
- Mountainous land on 65.00 chs.
-
- North, $89^\circ 48'$ E. on a random line bet. secs. 4 and 9.
- 40.00 Set temp. $\frac{1}{4}$ sec.cor.
- 74.15 The closing cor. of secs. 3 and 4, already described.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.

- 79.76 Intersect N. and S. line at the cor. of secs. 9 and 10, on S. bdy. of sec. 3.
Thence I run S. $89^{\circ} 48'$ W. on a true line on N. bdy. of sec. 9 and S. boundaries of secs. 3 and 4.
Over nearly level land; in clay gravelly soil; through scattering greasewood and iron wood undergrowth; ascend.
- 3.50 Road from Washington to Berry Spring and Virgin City bears S. 70° W. and N. 70° E.
- 5.61 The closing cor. of secs. 3 and 4, heretofore described on the line.
- 16.00 Begin ascent of clay and gypsum Broken foot hills, about 25 ft. above the cor. of secs. 9 and 10, bears N. E. and S. W.; frequent small washes and hollows, with drainage generally to S. W.
- 39.00 Wash 10 ft. wide and 6 ft. deep drains S. 50° E.
- 39.88 Set a gray sandstone 15x10x5 ins., 10 ins. in the ground for 1/4 sec. cor. N. bdy. of sec. 9, marked 1/4 on N. face; dug pits 18x18x12 ins., E. and W. of stone 3 ft. dist., and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.
This cor. is on clay and gypsum foot hills sloping S. E., about 100 ft. above the cor. of secs. 9 and 10.
- 45.61 Set a gray sandstone 15x7x5 ins., 10 ins. in the ground for 1/4 sec. cor. on S. bdy. of sec. 4, marked 1/4 on N. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
This cor. is on steep side hill sloping S. E., about 125 ft. above the closing cor. of secs. 3 and 4.
- 50.00 Foot of sandstone mountain about 150 ft. above the cor. of secs. 9 and 10, bears N. 20° E. and S. 20° W.; ascend abruptly over large sandstone boulders on S. E. slope of mountain; leave clay and gypsum foot hills.
- 58.35 Top of sandstone mountain about 175 ft. above the foot, bears N. E. and S. W.; descend abruptly over N. W. slope of mountain.
- 63.00 Wash in bottom of hollow at foot of mountain, about

Subdivisions of T.42 S., R.14. W.-Continued.

Chains. about 100 ft. below the top of mountain, about 6 ft. wide and 6 ft. deep, drains S. 50° W., along the foot of the mountain.
Ascend on S.E. slope of hollow.

74.20 Top of ascent, about 50 ft. above the wash, bears N.E. and S.W.; descend gradually.

75.20 Old road from Washington to Harrisburg bears S. 100° W. and N. 100° E.

79.76 The cor. of secs. 8 and 9 on S. bdy. of sec. 4, at about 120 ft. below the top of mountain range.

56.00
43.76 Land, nearly level, broken foot hills, and mountainous. Soil, clay, gypsum, gravelly and stony; 3rd. and 4th. rate. No timber.

Undergrowth, greasewood and iron wood.

Mountainous land on 56.00 chs.

Begin at the cor. of secs. 8 and 9 on S. bdy. of sec. 4, already described, and run

S. 89° 46' W., bet. secs. 4 and 8.

Descend over stony ground; through scattering greasewood and iron wood undergrowth.

1.00 Bottom of hollow about 25 ft. below the sec. cor., drains S.W.; ascend.

3.40 Top of hollow, about 10 ft. above bottom of hollow, bears S.W. and N.E.; thence descend gradually.

7.50 Telegraph line and old road bears S.W. and N.E.

7.90 Intersect E. bdy. of sec. 5, at 5.05 chs. N. 0° 39' W. of the old cor. of secs. 4, 5, 8 and 9, which is a white sandstone 4x10x8 ins. above ground, marked and witnessed as described by the Surveyor General.

Set an iron stone 25x12x4 ins., 19 ins. in the ground, for closing cor. of secs. 4 and 8, marked C1C1, with 4 grooves on E. and 5 grooves on S. faces, and raised a mound of stone 2 feet base, 1-1/2 ft. high E. of Cor. Pits impracticable.

I obliterate the marks on the old cor. pertaining to secs. 4, 8, and 9, and re-mark the stone for ^{S. E. Cor. of} sec. 5 only; and raised a mound of stone 2 ft. base, 1 1/2 ft. high,

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	<p>N.W.of cor. Pits impracticable. Land rolling. Soil, clay, gravelly and stony; 4th. rate. No timber. Undergrowth, greasewood and iron wood, with service berry on N.W. slope of mountain. June 10, 1899.</p>
	<p>From the cor. of secs. 5, 6, 31 and 32, on the S. bdy. of the Tp., which I established May 24, 1899, as described in Book "A" , I run N. 0° 4' E., bet. secs. 31 and 32. Descend over broken sandridges sloping N.W.; in rich sandy, gravelly soil; through scattering greasewood sage and iron wood undergrowth.</p>
27.40	<p>Fort Pierce wash at foot of descent, about 75 ft. below the sec. cor., about 25 ft. wide and 10 ft. deep, drains in broken general course N. 60° E. along the foot of mountain, W. side of Werner's or Fort Pierce canon. Road in wash from Fort Pierce to Washington follows the wash to the river bottom. Ascend on E. slope of sandridges in sandy stony ground leave rich sandy soil bears N.E. and S.W.</p>
36.00	<p>Wash about 10 ft. wide and 4 ft. deep, drains E. about 1.00 ch, thence S. 60° E. about 2.00 chs. to Fort Pierce wash.</p>
40.00	<p>Set a gray sandstone 20x16x5 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor. The cor. is on S.E. slope of sandridge about 100 ft. above the Fort Pierce Wash.</p>
57.80	<p>Foot of main ridge or mountain, top of sandridges, about 50 ft. above the 1/4 sec. cor., bears N.E. and S.W. Ascend abruptly on S.E. slope of sandstone mountain.</p>

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.

- 80.00 Set a gray sandstone 30x16x12 ins., 23 ins. deep in a mound of stone, for cor. of sec. 29, 30, 31 and 32, marked with 1 notch on S. and 5 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Sandstone surface prevented setting the cor. stone deeper.
Land mountainous and broken.
Soil, sandy and gravelly, and stony; 2nd. and 4th. rate.
No timber.
Undergrowth, greasewood, sage and iron wood.
Good grazing on ridges when supplied with moisture.
Mountainous land on 80.00 chs.
This cor. is near top of sandstone mountain about 250 above the 1/4 sec. cor.
-
- 40.00 East, on a random line bet. secs. 29 and 32.
Set temp. 1/4 sec. cor.
- 79.94 Intersect N. and S. line 26 lks. S. of cor. of secs. 28, 29, 32 and 33.
Thence I run
S. 89° 49' W. on a true line bet. secs. 29 and 32.
Descend over broken clay, sandy, gravelly and stony foot hills; through scattering greasewood, sage and iron wood undergrowth.
- 0.20 Ravine in bottom of hollow, about 10 ft. below the sec. cor., about 6 ft. wide and 6 ft. deep, drains N.; ascend.
- 4.00 Top of sandridge, about 50 ft. above the sec. cor., bears N. 100° W. and S. 100° E.; descend on W. slope of ridge.
- 9.24 Wash about 10 ft. wide and 5 ft. deep, heads at foot of perpendicular ledges 150 ft. high, about 7.00 chs. S. E. and drains N. 40° W.
- 34.94 Top of sandstone ledges about 100 ft. below the sec. cor., bears N. W. and S. E.; trail bears N. and S.; descend abruptly over broken ledges.
- 36.44 E. side of ravine at foot of ledges, about 50 ft. below top of ledges, drains N. about 1.00 ch. and thence N.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	30° W.; thence along bottom of ravine.
39.97	Set a gray sandstone 18x12x5 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. Cor. in ravine. A small spring and water trough bears S. 20° E. about 6.00 chs. dist.; drains N. 20° W. into ravine and sinks in sandy bottom. Ascend steep N.W. slope of ridge W. side of ravine.
51.34	Top of ridge about 50 ft. above the 1/4 sec. cor., bears N.W. and S.E.;
51.54	Trail from spring bears N. 30° W. and S. 30° E. Descend abruptly.
63.30	Fort Pierce wash about 75 ft. below where abrupt descent begins, about 40 ft. wide and 6 ft. deep, drains on winding general course, N. 20° E. Road in bottom of wash follows course of wash. Ascend broken sandridges and sand drifts.
66.44	Top of sandridges and sand-drifts about 50 ft. above the wash, and foot of sandstone and granite mountain; bears N. 20° E. and S. 20° W.; ascend abruptly over broken ledges.
79.94	The cor. of secs. 29, 30, 31 and 32, about 250 ft. above foot of mountain, and about 10 ft. below the top of mountain, known as Warner Range. Land mountainous and broken. Soil, sandy, gravelly, clay and stony; 3rd. and 4th. rate. No timber. Undergrowth, sage, greasewood and iron wood. Mountainous land on 79.94 chs. June 12, 1899: At this cor. at 12 ^h M., l.m.t., I set off 23° 11' N. on the decl. arc; the clouds obscured the sun's observation, and therefore I could not record the reading of the lat. arc.

Knowing I will close on the W. bdy. out. of limit, I run West on a true line bet. secs. 30 and 31.

Over stony, sandy gravelly and clay ground; through scattering sage, greasewood and iron wood undergrowth.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.

- 0.58 Top of sharp sandstone mountain, known as Warner Range, about 10 ft. above the sec. cor., bears N.40° E. and S. 40° W.; descend over almost perpendicular and broken ledges about 20 ft. high; and thence over abrupt N.W. slope of mountain.
- 9.38 N.W. foot of mountain about 200 ft. below the top, bears N.40° E. and S.40° W.; thence descend over broken sandy gravelly foot hills sloping N.W.
- 34.98 Trail bears N.100° E. and S.100° W.
- 35.10 Wash at foot of descent, about 275 ft. below the sec. cor., drains N.200° E.; ascend over broken sandy gravelly ridges.
- 40.00 Set a blue limestone 18x10x5 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.
This cor. is about 50 ft. above the wash.
- 56.00 Wash at foot of spur of limestone ridges about 50 ft. above the 1/4 sec. cor., about 30 ft. wide and 4 ft. deep, drains S.300° E.; ascend spur of ridge.
- 62.00 Top of spur of ridges, about 100 ft. high, bears N.100° E. and S.100° W.; descend over W. slope of spur.
- 67.60 Wash at W. foot of spur and E. foot of main ridge, about 125 ft. above the 1/4 sec. cor., about 8 ft. wide and 3 ft. deep, drains S.200° E.
Begin ascent of S.E. slope of main ridge which bears N.300° E. and S.300° W.
- 80.00 Top of ascent on the S.E. slope of mountain or ridge, about 175 ft. above the 1/4 sec. cor., bears N.200° E. and S.200° W.; descend into hollow.
- 83.00 Bottom of hollow at foot of mountain about 50 ft. deep, drains S.300° E.; ascend abruptly.
- 85.35 Intersect the W. bdy. of the Tp., 6.57 chs. N.00° 24' W. of the cor. of secs. 25, 30, 31 and 36, heretofore described-See notes of retracement of W. bdy. of this Tp. Book "B" . . . Set a porphyry stone 26x9x6 ins., 20 ins. deep in a mound of stone, for closing cor. of secs. 30 and 31, marked C.C. on E.; with 1 groove on S., and 5 grooves on N. faces; and raised a mound of

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	<p>stone 2 ft. base, 1 1/2 ft. high, E. of cor. Pits impracticable.</p> <p>I re-mark the old cor. of secs. 25, 30, 31 and 36, for cor. of secs. 25 and 36 T.42 S., R.15 W., only;</p> <p>Land mountainous and broken.</p> <p>Soil, stony, sandy, gravelly and clay; 4th. and 3rd. rate.</p> <p>No timber.</p> <p>Undergrowth, sage, greasewood and iron wood.</p> <p>Native grasses on ridges.</p> <p>Mountainous land on 85.35 chs.</p>
	<p>June 12, 1899: At 3^h 30^m, p.m. l.m.t., I set off 370° 8' N. on the lat. arc; 230° 12' N. on the decl. arc; and determine a true meridian with the solar, at the cor. of secs. 29, 30, 31 and 32.</p> <p>Thence I run</p> <p>N. 0° 4' E. bet. secs. 29 and 30.</p> <p>Over sandy, stony, clay and gravelly soil; through scattering sage, greasewood, cactus and iron wood undergrowth.</p> <p>Ascend S.E. slope of sandstone mountain.</p>
0.46	<p>Top of sharp sandstone mountain, known as Warner Range, about 10 ft. above the sec. cor., bears N. 40° E. and extends to the Virgin River, and S. 40° W.; descend abruptly over N.W. slope of mountain.</p>
10.00	<p>N.W. foot of mountain about 200 ft. below the top, bears N. 40° E. and S. 40° W.; thence descend more gradually over broken sandy ridges and foot hills, sloping N.W.</p>
20.00	<p>Foot of broken ridges and sandy foot hills, about 250 ft. below the sec. cor., bears N. 30° E. and S. 30° W.; thence over rolling sand hills and ridges;</p>
40.00	<p>Set a gray granite stone 30x12x8 ins., 23 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor. This cor. about 275 ft. below the sec. cor.</p>

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.

- 40.10 Trail bears N.30° E. and S.30° W..
- 43.00 Wash at foot of descent about 15 ft. below the 1/4 sec. cor., about 15 ft. wide and 5 ft. deep, drains N.60° E., about 4.00 chs.; thence on general course of N.30° E. to the Virgin River.
- Ascend over broken sandridges sloping generally about N.20° E.
- 56.15 Top of ascent about 25 ft. above the wash, bears N.E. and S.W.; descend.
- 62.55 Foot of descent about 25 ft. below the top, bears N.E. and S.W.; begin ascent of mountain sloping S.20° E.
- 63.00 Trail bears S.40° W., and N.40° E. to Rio Virgin.
- 80.00 Set a gray quartzite or flint stone 16x10x8 ins., 11 ins. in the ground, for cor. of secs. 19, 20, 29 and 30, marked with 2 notches on S. and 5 notches on E. edges; dug pits 18x18x12 ins. in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
- Land mountainous and broken ridges and foot hills.
- Soil, sandy and stony, gravelly and clay; 2nd, 4th, and 3rd. rate.
- No timber.
- Greasewood, sage, iron wood and native grasses and shrubbery on ridges and foot hills.
- Mountainous land on 80.00 chs.

June 12, 1899.

- N.89° 49' E. on a random line bet. secs. 20 and 29.
- 40.00 Set temp. 1/4 sec. cor.
- 80.04 Intersect N. and S. line 10 lks. N. of cor. of secs. 20, 21, 28 and 29.
- Thence I run
- S.89° 53' W. on a true line bet. secs. 20 and 29.
- Along the bottom of Fort Pierce wash; over sandy, gravelly, stony and clay ground; through scattering sage, greasewood, iron wood, cactus and native grasses.
- 0.55 West bank of wash about 8 ft. high, bears N.E. and S.;

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	ascend broken foot hills.
3.50	E.foot of volcanic reef, about 30 ft. above the sec. cor., bears N.20° E. and S.20° W.; ascend abruptly.
4.00	Top of volcanic reef about 40 ft. above the sec. cor., bears N.20° E. and S.20° W.; descend W. slope of reef.
6.50	West foot of reef and E. foot of granite-sandstone mountain, about 25 ft. above the sec. cor. bears N.30° E. on general course to the Rio Virgin, and S.30° W.; ascend abruptly on S.E. slope of mountain.
15.00	Top of mountain about 350 ft. above the sec. cor., bears N.40° E. and S.40° W.; descend abruptly over broken ledges and steep side of mountain on N.W. slope.
22.50	Bottom of hollow at W. foot of mountain, about 300 ft. below top of mountain, drains N.30° W.; ascend spur at foot of mountain.
23.17	Top of spur about 50 ft. above the foot of mountain, bears N.30° W. and S.30° E. and joins main ridge at about 4.00 chs. dist.; descend.
25.00	Ravine at foot of descent about 15 ft. deep and 20 ft. wide drains N.25° W.; ascend spur of mountain.
25.50	Top of spur about 20 ft. above the ravine, bears N.30° W. and S.30° E.; descend over broken spurs of mountain and ridges, and broken foot hills, sloping N.20° W.
33.50	Wash in hollow at foot of broken sandridges and spurs of mountain, about 400 ft. below top of the mountain, about 10 ft. wide and 6 ft. deep, drains N.40° W.; ascend over broken sandridges.
40.02	Set a volcanic stone 16x10x8 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18x12 ins., E. and W. of stone 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor. Continue ascent over broken ridges drained by numerous small hollows and washes, with a general course of N. and N.W.
52.50	Wash about 16 ft. wide and 6 ft. deep, drains N.30° E.
53.40	Trail bears N.30° E. and S.30° W.
61.30	Trail bears N.30° E. and S.30° W.
63.45	Trail bears N.30° E. and S.30° W.
64.50	Begin ascent of mountain about 50 ft. above the 1/4 sec. cor., bears N.40° E. and S.40° W.;

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	thence on S.E.slope of mountain.
80.04	<p>The cor.of secs.19,20,29 and 30.</p> <p>This cor.is about 100 ft.above the 1/4 sec.cor.</p> <p>Land mountainous and broken ridges and foot hills.</p> <p>Soil, stony, sandy, gravelly and clay; 4th.2nd.and 3rd. rate.</p> <p>No timber.</p> <p>Undergrowth and vegetation, greasewood, sage, cactus, iron wood, native grasses and shrubbery.</p> <p>Mountainous land on 80.04 chs.</p>
	<p>June 13, 1899: At 10^h a.m., l.m.t., I set off 370' ^{9'}</p> <p>N.on the lat.arc; 25° 14' : N.on the decl.arc; and</p> <p>determine a true meridian with the solar, at the cor. of secs.19,20,29 and 30.</p> <p>Thence I run</p> <p>W.on a true line bet.secs.19 and 30.</p> <p>Over broken ridges; in gravelly clay and sandy soil; through scattering greasewood and iron wood undergrowth. Ascend E.slope of ridge.</p>
3.60	Top of ridge about 10 ft.above the sec.cor., bears N. and S.; descend over N.slope of broken ridges sloping to N.and N.W.
5.45	Bottom of hollow about 50 ft.below top of ridge, drains N.10° W.; ascend E.slope of ridge.
6.50	Top of ridge W.side of hollow, about 20 ft.above the hollow, bears N.10° W.and S.10° E.; descend.
8.50	Bottom of hollow about 40 ft.below top of ridge, drains N.10° E.; thence descend over top of ledges at head of ravine, which drains N.10° W.
12.50	Leave head of ravine and descend over W.slope of ridge.
17.50	Bottom of hollow at W.foot of ridge about 75 ft. below the sec.cor., drains N.20° W.;
18.60	Wash in bottom of same hollow, about 6 ft.wide and 4 ft.deep, drains N.20° W.; ascend E.slope of ridge.
21.70	Top of ridge about 40 ft.above the wash bears N.10° W. and S. 10° E.; descend.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.

- 22.80 Bottom of hollow about 30 ft. below the top of ridge, drains N.20° W.; ascend.
- 24.40 Top of ridge about 25 ft. high, bears N.W. and S.E.; descend.
- 26.50 Wash in bottom of hollow about 20 ft. below top of ridge, about 4 ft. wide and 4 ft. deep drains N.; thence ascend.
- 30.50 Top of sharp ridge about 50 ft. high, bears S.80° E. and N.80° W.; descend into hollow.
- 35.30 Trail bears N. and S.
- 36.50 Wash in bottom of hollow about 50 ft. below top of sharp ridge about 4 ft. wide and 4 ft. deep, drains N. 40° W. ascend.
- 39.20 Top of ridge about 50 ft. above the ravine or wash bears N. and S.; descend W. slope of ridge.
- 40.00 Set a gray limestone 16x8x6 ins., 11 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18 x12 ins., E. and W. of stone 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor. Cor. is about 40 ft. below top of last ridge.
- 40.65 Bottom of hollow about 10 ft. below the 1/4 sec. cor., drains N.; ascend.
- 41.50 Top of ridge about 40 ft. high, bears N. and S.; descend
- 44.30 Wash in bottom of hollow about 30 ft. below top of ridge, 3 ft. wide and 3 ft. deep, drains N.; ascend.
- 46.50 Top of ridge about 40 ft. high, bears N. and S.; descend
- 48.50 Wash in bottom of hollow about 30 ft. below top of ridge about 15 ft. wide and 5 ft. deep, drains N. 10° W.;
- 49.80 Wash in bottom of same hollow, about 4 ft. wide and 4 ft. deep, drains N.30° W.; ascend.
- 51.50 Top of ridge W. side of hollow about 25 ft. high, bears N.20° W. and S.20° E.; descend.
- 55.90 Hollow at foot of ridges or mountain about 25 ft. deep, drains N.100° E.; thence over broken sandy foot hills, sloping N. and N.W., leave
- 80.00 Leave clay, gravelly and stony ground and enter sandy loamy soil, bears N. and S.
- 83.80 Bottom of hollow about 50 ft. below the 1/4 sec. cor., drains N.30° W.; ascend S.E. slope of ridge.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.

85.65 Intersect W.bdy.of the Tp.5.90 chs.,N.00°40' W.from the old cor.of secs.19,24,25 and 30,heretofore described-See retracement of W.bdy.of Tp.Book B

.Set a blue limestone 24x12x5 ins.,18 ins. in the ground,for closing cor.of secs.19 and 30, marked C.C.on E.;with 2 grooves on S.and 4 grooves on N.faces;dug pits 24x18x12 ins.crosswise on each line N.and S.3 ft.,and E.of stone 7 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,E.of cor. I-re-marked the old cor.of secs.19,24,25 and 30 for cor.of secs:24 and 25,T.42 S.,R.14 W.,only.

Soil,stone,clay,loam,gravelly and sandy loam;4th. Band,mountainous,broken ridges and foot hills,with drainage toward the Virgin River.

Soil;stony,sandy,clay,gravelly and sandy loam;4th. 3rd.and 2nd.rate.

No timber.

Greasewood.and iron wood undergrowth;native grasses and shrubbery.

Mountainous land on 85.65 chs.

N.00 4' E. bet.secs.19 and 20.

Over broken gravelly and stony ridges;through scattering greasewood and iron wood undergrowth.

Ascend.

3.00 Top of ascent about 15 ft.above the sec.cor.,bears N.20° E.and S.20° W.;descend abruptly.

18.38 Washington canal at foot of ridges about 125 ft. below the sec.cor.,about 14 ft.wide and 6 ft.deep , filled with fresh water from the Rio Virgin,heads at Washington dam,runs moderate current,curving to S.80° W. about 10.00 chs.dist.;thence N.70° W.and crosses the 1/2 quarter sec.line at about 20.00 chs. W.of the N.and S.sec.line.

18.60 N.side of canal in river bottom;enter Charles Westover's farm and pasture which bears E. about 40.00 chs.and W.and N.W.about 40.00 chs.in river bottom.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	to his dwelling houses, corralls, garden and orchard, near center of sec. 19; and thence about 40 acres of farm in S. 1/2 of N.W. 1/4 of sec. 19 bet. the canal and Virgin River..
20.00	N. foot of the bank of canal about 25 ft. below the canal. At 42.30 chs. the point for the Meander cor. falls on changeable bank S. side of Rio Virgin, subject to overflow during high floods and cannot be safely set, therefore, at this point I establish a witness cor. as follows: Set a white sandstone 20x12x12 ins., 15 ins. in the ground, for witness cor. to the meander cor. of fractional secs. 19 and 20 on S. bank of the Rio Virgin, marked W.C.-M.C.-on N. face; with 5 grooves on E. face; from which A cotton wood 20 ins. diam, bears N. 61° 25' E., 169 1/2 lks. dist., marked W.C.-T. 42 S.-R. 14 W.-S. 20-M.C.-B.T. A cottonwood 19 ins. diam, bears N. 83° 45' W., 113 1/2 lks. dist., marked. W.C.-T. 42 S.-R. 14 W.-S. 19-M.C.-B.T. June 13, 1899: At this witness cor. for meander cor, the sky is overcast at 12 O'clock M. and solar observation to determine the reading of the lat. arc is impossible.
20.75	Irrigation canal about 3 ft. wide and 2 ft. deep, drains S. 80° W.
20.85	A row of cottonwood trees bears N. 80° E. and S. 80° W. thence across Charles Westover's lucerne ground.
23.35	Leave lucerne ground and enter pasture land bears E. and W.
30.06	Live cottonwood and dry willow fence on N. side of farm and pasture bears E. and W.; irrigation canal S. side of fence about 3 ft. wide and 2 ft. deep drains W. Leave farm and pasture and enter sandy, gravelly river bottom; through medium dense willows and scattering cotton wood and ash timber; also black willow black willow timber.
40.00	The point for the 1/4 sec. cor. falls in the river bottom subject to overflow at time of floods and

Subdivisions of T.42 S., R.14 W.-Continued.

- Chains. liable to be covered with sediment from sluice ditch running from Washington canal and cannot be safely established. I drove a cottonwood stake 4 ft. long, 4 ins. diam., 36 ins. in the ground at the cor. point.
- 42.30 Point for the meander cor. of fractional secs. 19 and 20 falls on unsafe ground, and is already witnessed., 22.30 chs. S. of this point. This being the nearest point on the line at which to safely establish a witness corner.
- Charles Westover's dwelling houses, corralls, stables etc., with garden on S. and orchard and farm on W. and N.W., bears W. about 43.00 chs.
- 43.75 S. edge of the water of the Rio Virgin at or near low water mark, now about 100 ft. wide and 10 ins. deep, rapid current, gravelly bottom, muddy fresh water, runs S. 70° W.
- 45.25 Enter dense willow undergrowth bears E. and W.
- 45.55 The N. bank of the Rio Virgin.
- Set a yellow sandstone 24x12x5 ins., 18 ins. in the ground, for meander cor. of fractional secs. 19 and 20, marked
- M.C. on S. face; with 5 grooves on E. face; dug a pit 36x36x12 ins., 8 ft. N. of stone; and raised a mound of earth and stone 4 ft. base, 2 ft. high, N. of cor.
- 45.90 Leave dense willow undergrowth and enter scattering willows bears E. and W.
- 46.00 Set a volcanic stone 20x12x8 ins., 15 ins. in the ground, for witness corner to the 1/4 sec. cor., marked W.C. on S. face; with 1/4 on W. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor.
- Pits impracticable. This cor. is about 10 ft. above the river bed, at S. foot of low bench.
- Leave willows and enter scattering greasewood and iron wood bears E. and W.; ascend S. slope of bench.
- 46.30 Irrigation canal, average about 4 ft. wide and 3 ft. deep, filled with fresh water from Rio Virgin, heads at the Washington dam, drains S. 75° W. about 5.00 chs. thence about N. 30° W.
- 46.88 Road from Washington to the farms in the River bottom and Virgin City bears S. 85° W. and N. 25° E.; Leave sandy gravelly soil & enter sandy loamy soil

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	bears E. and W.
55.00	Road from Washington to farms in River bottom and Virgin City, bears S. 85° W. and N. 85° E. W. side of Ormond Wilkins farm, about 40 acres under cultivation, bears E. about 12.00 chs. dist. Ormond Wilkins cabin bears E. about 45.00 chs. dist.
60.15	Road from Washington to farms in river bottom and Virgin City, bears N. 30° E., and joins last named road S. 30° W. about 10.00 chs. dist. E. side of George Prince's farm and pasture, with about 20 acres cultivated land, bears W. about 23.00 chs. dist.
61.80	Top of ascent about 50 ft. above the river bottom, bears N. E. and S. W.; thence descend in clay gravelly soil; leave sandy loamy soil, bears E. and W.
62.75	Foot of descent about 20 ft. below top of ascent, bears N. E. and S. W.; thence over almost level clay flat or basin.
66.80	Road from Washington to Harrisburg branch road and Berry Spring and Virgin City, bears S. 40° W., and joins other road N. 40° E. about 20.00 chs. dist. Leave clay flat or basin and ascend S. slope of broken foot hills.
70.00	Top of ascent about 25 ft. above the basin or flat, bears S. 20° W. and N. 20° E.; descend N. W. slope of ridge.
75.80	Wash at foot of descent about 20 ft. below top, about 20 ft. wide and 6 ft. deep, drains S. 20° W. about 2.00 chs.; thence S. 80° W. about 4.00 chs.; thence S. 20° W. to the river bottom; ascend sandridges.
80.00	Set a volcanic stone 18x6x6 ins., 12 ins. in the ground for cor. of secs. 17, 18, 19 and 20, marked with 3 notches on the S. and 5 notches on E. edges; dug pits 18x18x12 ins., in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor. This cor. is on low foot hills about 60 ft. above the river bottom. Land, mountainous, almost level river bottom, low bench and broken foot hills. Soil, S. of river bottom gravelly and stony; in river bottom, rich sandy loam intermixed with coarse wash

3150
11.50
C.V.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	<p>sand; on the bench and low ridges N. of river bottom, rich sandy and clay soil, slightly intermixed with gravel; -4th. and 2nd. rate.</p> <p>No timber, except scattering cottonwood, black willow and ash in the river bottom.</p> <p>Undergrowth on benches and mountain ridges greasewood and sage; in the river bottom willows.</p> <p>Water rush and willow in the river bottom afford good pasturage.</p> <p>Mountainous land on 31.50 chs.</p>
40.00	<p>N. 89° 53' E. on a random line bet. secs. 17 and 20.</p> <p>Set temp 1/4 sec. cor.</p>
79.82	<p>Intersect N. and S. line 23 lks. S. of cor. of secs. 16, 17, 20 and 21.</p> <p>Thence I run</p> <p>S. 89° 43' W. on a true line bet. secs. 17 and 20.</p> <p>Over gravelly and stony ground and broken ridges and foot hills; through scattering greasewood and iron wood undergrowth.</p> <p>Ascend S.E. slope of ridge.</p>
9.20	<p>Top of ridge about 25 ft. above the sec. cor., bears S. about 1.00 ch.; and N. 20° E.; descend.</p>
10.00	<p>Foot of ridge about 20 ft. below top of ridge bears N. 100° E. and S. 100° W.; thence along broken foot hills on S. and S.E. slope.</p>
27.30	<p>Wash 10 ft. wide and 3 ft. deep heads in gravelly ridge about 8.00 chs. N. and drains S. 100° E.</p>
39.91	<p>Set a gray limestone 20x10x6 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.</p> <p>This is on S.E. slope of limestone spur of mountain, about 50 ft. above the sec. cor.</p>
41.30	<p>Top of spur of mountain about 20 ft. above the 1/4 sec. cor., bears S. 30° E. and N. 30° W. and joins main ridge or mountain; descend over S.W. slope cut up with numerous small washes and hollows.</p>

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.

- 52.80 Leave foot of mountain bears N.; ascend.
- 59.65 Road at top of ascent about 25 ft. above the foot of mountain, bears N.; and S. 1.00 ch., and thence S. 30° E. Descend, over surface cut up with small washes and hollows which drain S.W.
- 64.00 Old road bears N. 10° W. and S. 30° E. about 1.00 ch.; thence S. 80° W.
- 70.60 Road from Washington to Berry Spring and Virgin City bears S. 10° W. and N. 10° E.
- 72.40 Wash at foot of descent about 75 ft. below the 1/4 sec. cor., about 27 ft. wide and 5 ft. deep, drains S. 30° W. about 2.00 chs., W. about 3.00 chs., thence S. 20° W.; ascend.
- 79.82 The cor. of secs. 17, 18, 19 and 20.
Land mountainous and broken foot hills and bench. Soil, clay, gravelly, stony and sandy; 4th, 3rd. and 2nd. rate. Limestone on spur of ridge near 1/4 sec. cor. No timber.
The drainage is all toward the river bottom. Mountainous land on 52.80 chs.
- West on a true line bet. secs. 18 and 19.
Over broken ridges and foot hills; in clay, gravelly stony and gypsum soil; through scattering greasewood and iron wood undergrowth.
Wash drains southwesterly.
- 5:00 Wash 10 ft. wide and 8 ft. deep drains S.
- 25.40 George Prince's farm in river bottom bears S. about 20.00 chs.
- 36.00 Begin very abrupt ascent on S.E. slope of mountain, bears N.E. and S.W., about 120 ft. above the sec. cor.
- 39.95 Foot of ledges, almost perpendicular, about 150 ft. above the sec. cor., bears N. 30° E. and S. 30° W.; ascend abruptly over broken ledges.
- 40.00 Top of ledges on S.E. slope of high mountain about 200 ft. above the sec. cor.
Set a red burnt sandstone 24x12x8 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and

Subdivisions of T.42 S., R.14 W.-Continued.

Chains. raised a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable; the cor. is on steep side of mountain.

Charles Westover's cabins on E. side of the Rio Virgin, bears S. 50° W. about 35 and 37 chs. dist. respectively.

58.75 Top of granite and sandstone mountain about 125 ft. above the 1/4 sec. cor., bears S. 40° W. and N. 40° E.; thence descend over N.W. slope of mountain.

86.23 Intersect the W. bdy. of the Tp., 5.08 chs., N. 0° 20' W. of the old cor. of secs. 13, 18, 19 and 24, as described in retracement of the W. bdy. of this Tp.-See Book "B" . Set a gray sandstone 30x8x8 ins., 23 ins. deep in a mound of stone, for closing cor. of secs. 18 and 19, marked C.C. on E. face; with 3 grooves on N. and S. faces; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, E. of cor. Pits impracticable. Hard sandstone prevented setting the cor. stone deeper. I destroy the marks on the old cor. pertaining to secs. 18 and 19, and re-mark the stone for cor. of secs. 13 and 24, T. 42 S., R. 15 W., only.

The closing cor. is on N.W. slope of high mountain about 50 ft. below the top of mountain.

Land mountainous and broken foot hills and ridges. Soil, clay, stony, gypsum and gravelly; 3rd. and 4th. rate.

No timber.

Greasewood and iron wood undergrowth; shrubbery and native grasses on foot hills, ridges and top of mountain.

Mountainous land on 86.23 chs.

June 13, 1899.

N. 0° 4' E., bet. secs. 17 and 18.

Over broken foot hills, mountains and ridges; in clay sandy stony ground; through scattering greasewood, and iron wood undergrowth.

Ascend.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	
3.00	Wash about 4 ft.wide and 3 ft.deep,drains S.200° W. and crosses E.and W.line at about 5.00 chs.W.of sec.cor.
4.22	Trail bears S.200° W.and N.200° E..
12.00	Enter clay and gypsum broken foot hills about 25 ft. above the sec.cor.,bears N.30° E.and S.30° W.
20.32	Top of clay gypsum foot hills and ridges,about 100 ft.above the sec.cor.,bears N.300°E and S.300° W.; descend over N.W.slope.
24.00	Wash in bottom of hollow about 30 ft.below the top of clay-gypsum foot hills,about 4 ft.wide and 4 ft. deep,drains S.200° W.;thence ascend on S.slope of clay gypsum foot hills.
30.00	Foot of mountain about 100 ft.above the sec.cor., bears N.350° E.and S.350° W.;leave clay-gypsum foot hills and ascend abruptly over broken ledges on S.E. slope of mountain.
36.95	Top of mountain about 200 ft.above the sec.cor., bears N.400° E.about 50.00 chs.,and adjoins the principal range of mountains at a distance of about 50.00 chs.,S.400° W.;descend abruptly over boulders at top of mountain.
37.14	Foot of boulders about 25 ft.below the top of mountain bears N.400° E.and S.400° W.;thence descend more gradually.
40.00	Set a yellow burnt sandstone 24x10x5 ins.,18 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face; dug pits 18x18x12 ins.,N.and S.of stone 3 ft.dist., and raised a mound of earth,3 1/2 ft.base,1 1/2 ft. high,W.of cor.
50.25	"Twist"road from Virgin City and Berry spring and farms in river bottom to Harrisburg and Washington bears N.600° E.about 50.00 chs.to point of mountain, thence S.300° E.;and S.600° W.about 4.00 chs;N.about 4.00 chs.,W.about 8.00 chs.to top of ridge at head of "Twist",thence N.300° W.about 15.00 chs.,with branches running N.E.and N. to the main road from Saint George to Salt Lake City.
54.00	S.foot of mountain and foot of descent,about 25 ft. below the 1/4 sec.cor.,bears N.E.and S.W.;thence

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	ascend abruptly on steep S.E.slope of main ridge or mountain range.
62.00	Top of sandstone mountain about 150 ft.above the foot,bears N.40° E.and S.40° W. Mountain peak about 35 ft.above the top of ridge bears W.about 1.00 ch. Remains. of old mineral locations on top of this mountain and on N.slope.;descend abruptly over abrupt and broken ledges on N.W.slope of mountain.
80.00	Foot of mountain about 175 ft.below the top,bears N.E.and S.W. Set a red sandstone 24x8x8 ins.,18 ins.in the ground, for cor.of secs.7,8,17 and 18,marked with 4 notches on S.and 5 notches on E.edges;and raised a mound of stone,2 ft.base,1 1/2 ft.high,W.of cor.Pits impracticable. Hard sandstone surface. Land mountainous and broken ridges and foot hills. Soil,soil sandy,clay,gypsum,gravelly and stony;3rd. and 4th.rate. No timber. Scattering greasewood, ^{growth.} oose&cactus under- Mountainous land on 80.00 chs.
	N.89° 43' E.on a random line bet.secs.8 and 17.
40.00	Set temp.1/4 sec.cor.
79.58	Intersect N.and S.line 7 lks.N.of cor.of secs.8,9, 16 and 17. Thence I run S.89° 46' W.on a true line,bet.secs.8 and 17. Descend over clay,gravelly foot hills;through scattering greasewood and iron wood undergrowth.
10.80	Lime stone reef about 25 ft.high,and 3.00 chs.wide, bears N.30° E.and S.30° W.
14.60	Road from Washington to Berry Spring and Virgin City about 75 ft.below the sec.cor.,bears S.30° W.and N. 30° E.
18.40	Wash 10 ft.wide and 6 ft.deep,drains S.20° W.
20.00	Foot of descent about 100 ft.below the sec.cor., bears N.40° E.and S.40° W.;ascend.
24.00	Foot of broken clay gypsum foot hills and ridges,

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	bears N.40° E. and S.40° W.; thence ascend over foot hills and ridges with drainage generally S. and S.W. toward the river bottom.
39.79	Set a gray sandstone 30x10x4 ins., 23 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18x12 ins., E. and W. of stone 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor. This cor. is on clay-gypsum foot hills about 100 ft. above the sec. cor.
50.00	S.E. foot of mountain about 150 ft. above the sec. cor. bears N.30° E. and S.30° W. leave clay gypsum foot hills and ascend abruptly on S.E. slope of mountain.
60.75	Top of sandstone mountain about 125 ft. above the last 1/4 sec. cor., bears N.30° E. and S.30° W.; descend abruptly over N.W. slope of mountain. Indications of minerals along the N.W. slope of this range.
67.00	Foot of descent on N.W. slope of mountain, about 75 ft. below top of mountain, bears N. and S.; thence ascend E. slope of spur of mountain.
70.70	Top of spur of ridge about 40 ft. above the foot of spur, bears N. and S.; descend abruptly over N.W. slope of ridge and spur.
79.58	The cor. of secs. 7, 8, 17 and 18. About 150 ft. below top of main ridge. Land, mountainous, broken ridges and foot hills. Soil, clay, gypsum, gravelly and stony; 2nd. and 4th. rate. No timber. Mountainous land on 79.58 chs. June 14, 1899: At this cor. of secs. 7, 8, 17 and 18, I set off 23° 18' N. on the decl. arc; and, at 12 ^h M., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 10' N.

7

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	From the cor. of secs. 7, 8, 17 and 18, I run West on a true line bet. secs. 7 and 18. Descend gradually over clay, gravelly and sandy foot hills, sloping W. and N.W.; through scattering greasewood and iron wood undergrowth.
I.85	Road from Salt Lake City to Berry Spring & Virgin City "up the Virgin" and river bottom farms and Washington "down the Virgin", at foot of foot hills, bears N. 40° E. and S. 40° W.; thence over nearly level valley.
II.00	Wash about 10 ft. wide and 5 ft. deep, drains S. 200 W. winding along the foot hills, and enters deep chasm at about 15.00 chs. N. of the closing cor. of secs. 18 and 19 on the W. bdy. of the Tp. Leave clay gravelly soil and enter rich sandy soil.
18.00	Road from St. George to Salt Lake City bears S. 250 W. and N. 250 E. This road begins to ascend volcanic mountain on dug-way at about 4.00 chs. dist, S. 250 W.; where the Berry Spring and Virgin City "Twist" road enters the main road.
18.50	S.E. foot of volcanic mountain, about 25 ft. below the sec. cor., bears N. 300 E. and S. 300 W.; ascend abruptly on S.E. slope of volcanic mountain over boulders and stony ground; leave sandy soil.
35.18	Top of volcanic ridge known as the Washington ^{Black} Ridge, about 125 ft. high, bears N. 300 E. and S. 300 W.; descend gradually over top of ridge or mountain.
35.33	Telegraph line from Salt Lake City to St. George, bears N. 600 E. and S. 600 W.
40.00	Set a volcanic or lava stone 18x10x8 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable on account of volcanic stone.
55.25	Top of volcanic ledges W. side of the Washington ^{Black} Ridge, about 50 ft. below where the line strikes the ridge on the E. side, bears N. E. and S. 200 W.; thence descend abruptly over broken ledges and large volcanic boulders on W. slope of ridge.
60.00	Leave boulders and ledges about 50 ft. below the top of ridge and descend more gradually over volcanic stone.

Subdivisions of T.42 S., R.14 W.-Continued.

Chains.

- 67.00 Leave volcanic stone and enter sandy and gravelly ground, bears N. and S.
- 71.00 Leave sandy gravelly soil and re-enter volcanic stone bears N. and S.
- 73.95 Wash at W. foot of volcanic ridge about 150 ft. below top of ridge or mountain, about 10 ft. wide and 6 ft. deep, drains S. 10° E. about 1.00 ch.; thence S. 20° W.; thence over broken sandridges in deep hollow.
- 76.00 Wash about 15 ft. wide and 6 ft. deep drains S.
- 80.10 Wash in bottom of hollow about 20 ft. wide and 6 ft. deep, drains S. 30° E. and joins wash last named at a distance of about 6.00 chs. Scattering willows along the banks of the wash.
- 80.40 East foot of sandridge in bottom of hollow, about 150 ft. below the Washington black ridge, bears N. and S. Leave stony ground; enter rich sandy soil bears N. & S. Ascend E. slope of sandridge.
- 83.00 Top of sandridge about 50 ft. above the bottom of hollow bears N. and S.; thence over level top of sandridges.
- 86.58 Intersect W. bdy. of the Tp. at 5.10 chs. N. 00° 12' W. from the old cor. of secs. 7, 12, 13 and 18, heretofore described in notes of re-survey of the W. bdy of the Tp. See Book "B"
- Set a lava stone 18x8x6 ins., 12 ins. in the ground, for closing cor. of secs. 7 and 18, marked C.C. on E. face; with 4 grooves on S. and 2 grooves on N. faces; dug pits 24x18x12 ins. crosswise on each line N. and S. of stone 3 ft. dist, and E. of stone 7 ft. dist; and raised a mound of earth 4 ft. base, 2 ft. high, E. of cor. I re-marked the old cor. of secs. 7, 12, 13 and 18 for cor. of secs. 12 and 13 T.42 S. R.14 W. only.
- Land broken foot hills and ridges, rolling narrow valley and mountainous.
- Soil, sandy and gravelly, stony, and rich sandy soil; 3rd. 4th. and 2nd. rate.
- No timber.
- Mountainous land on 70.00 chs.

77

Subdivisions of T.42. S., R.14. W.-Continued.

Chains.	June 14, 1899: At 4 ^h p/m., 1.m.t., I set off 370.10' N. on the lat. arc; 23° 19' N. on the decl. arc; and determine with the solar a true meridian at the cor. of secs. 7, 8, 17 and 18.
	Thence I run N. 0° 4' E. bet. secs. 7 and 8.
	Descend on N.W. slope of foot hills; over stony ground through scattering iron wood, greasewood and oose.
2.20	Road at foot of foot hills bears S. 30° W.; and N. 30° E. intersecting the main road from St. George to Salt Lake City at about 60.00 chs. dist.
5.00	Enter rich sandy, gravelly soil bears N. 30° E. and S. 30° W.; leave stony ground.
9.00	Foot of descent about 40 ft. below the sec. cor., bears N. 30° E. and S. 30° W.; ascend gradually.
14.55	Road from St. George to Salt Lake City bears S. 40° W. and N. 40° E.
17.55	E. bank of wash about 60 ft. wide and 8 ft. deep, drains S. 10° W.
17.70	Telegraph line from St. George to Salt Lake City, bears N. 30° E. and S. 30° W.
18.70	On West bank of ^{first} wash bears N. 10° E. and S. 10° W.
19.15	^{Second} Wash 20 ft. wide and 6 ft. deep, drains S. 10° W. and joins last named wash at about 40 lks. dist.
23.25	On S. bank of 3rd. wash about 40 ft. wide and 6 ft. deep, drains S. 10° E. and joins 2nd. wash at about 50 lks. dist.; thence along the bottom of wash.
25.80	N. bank of 3rd. wash, about 6 ft. high bears N. 20° E. and S. 20° W.; leave wash
28.25	Branch road from St. George to Salt Lake City, bears N. 40° E.; and S. 40° W. about 1.00 ch., thence S. 20° W. and joins main road at about 15.00 chs. dist.
40.00	Set a gray sandstone 24x12x4 ins., 18 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone 3 ft. dist.; and raised a mound of earth 3 1/2 ft. base, 1 1/2 ft. high, W. of cor. Wash is about 50 lks. E. of cor., which drains S. 45° E. about 5.00 chs., thence S. and South-westerly.
	This cor. is about 25 ft. above the sec. cor. in rolling sand hills.

Subdivisions of T.42. S., R.14. W.-Continued.

Chains.

- 43.00 Re-enter wash on S.bank about 40 ft.wide and 4 ft. deep at this point, drains S.30° E.; thence along bottom of wash.
- 46.60 Leave wash to the right, drains S.10° W.
- 54.00 Begin descent on N.slope of sandridge at about 50 ft.above the 1/4.sec.cor.
- 55.70 Re-enter wash on S.bank at foot of sandridge, about 25 ft.below top of sandridge, about 30 ft.wide and 6 ft.deep at this point, drains S.30° E.5.00 chs.; thence S.10° E. and S.westerly.; thence along the bottom of wash.
- 56.60 Leave wash to left and gradually ascend on S.E.slope of sandridge; leave sandy gravelly soil and enter sandy stony ground.
- 66.00 S.E.cor.of Alowis Bauer's field in his Desert Land Entry, W.side of wash, bears W.about 2.50 chs..
- 71.50 Trail bears N.30° E.and S.30° W.
- 75.00 N.E.cor.of Alowis Bauer's field of about 10 acres, on W.side of wash bears W. about 4.00 chs. Reservoir and flume on N.side of field.
- 75.60 Intersect the S.line of sec.5, 9.00 chs. S.89° 39' E. of the old cor.of secs.5, 6, 7 and 8, which is a sandstone of red quality 14x12x4 ins., partly broken, marked and witnessed as described by the Surveyor General. I replace the old cor.with an iron stone 15x10x6 ins; set 10 ins.in the ground, marked for secs.5 and 6 only; dug pits 24x24x12 ins., in each sec., 6 ft.dist.; and raised a mound of earth, 4 ft. base, 2 ft.high N.of cor.
- At the point of intersection on the S.bdy.of sec.5, set a gray sandstone 26x8x6 ins., 20 ins.in the ground for closing cor.of secs.7 and 8, marked C.C.on S.; with 5 grooves on S.and E.faces; dug pits 24x18x12 ins.crosswise on each line E.and W., 3 ft., and S.of stone 7 ft.dist.; and raised a mound of earth 4 ft.base, 2 ft.high S.of cor.
- This cor.is on sandridge sloping S.W. about 100 ft. above the last 1/4 sec.cor.
- The old cor.of secs.5, 6, 7 and 8 is the N.W.cor.and beginning cor.of the survey of Alowis Bauer's Desert

Subdivisions of T.42 S., R.14 W.-Continued.

Chains. land claim No. 4452, reported by the Surveyor General as W.1/2 of N.W.1/4 of Sec. 8.

Alowis Bauer's house near a small spring in sec. 5, bears N. 20° E. about 20.00 chs. dist. An irrigation ditch averaging about 2 ft. wide and 2 ft. deep, extends from spring South Westerly to the head of reservoir on N. side of his Desert Land Claim. He has a farm and pasture enclosed with picket and wire fence in W.1/2 of S.W.1/4 of sec. 5, embracing about 25 acres..

Land, broken foot hills and ridges and rolling.

Soil, stony and gravelly and rich sand; 4th., 3rd., and 2nd. rate.

No timber.

Undergrowth and vegetation, greasewood, iron wood, yucca, cactus, native grasses and shrubbery.

Mountainous land on 21.00 chs.

June 14, 1899.

Mayhew H. Galley
U.S. Deputy Surveyor

Meanders of the left bank of the Rio Virgin, down stream.

Before commencing the Meanders of this Tp., I return to the meridian established May 23, 1899, from Polaris, at the cor. of Tps. 42 and 43 S., Rs. 13 and 14 W., and described in the notes of the S. bdy. of T. 42 S., R. 14 W., Book "A", and test the adjustments of my instrument as follows:

June 16, 1899: At 7^h a.m., l.m.t., I set off 370° 7' N. on the lat. arc; 230° 23' N. on the decl. arc; and test the adjustments of my solar, finding that it gives the same meridian as before and adjustments correct.

I commence at the point for the meander cor. of fractional secs. 1 and 36 on the N. bdy. of the Tp., 30 lks. S. 89° 57' E. of the point for the cor. of secs. 1, 2, 35 and 36, in the river, and 25 lks. N. 89° 57' W. of the witness cor. for this meander cor., which I established May 27, 1899, for description of which see Book "B",

At this point for Meander Corner, June 16, 1899: I set off 370° 12' 10" N. on the lat. arc; 230° 22' 30" N. on the decl. arc; and determine a true meridian with the solar. at 8^h 00^m a.m. l.m.t.

Thence I run with meanders in sec. 1.

Through dense willow and rabbit brush undergrowth; over nearly level ground; in rich sandy, and stony soil.

S. 10 1/4 ° E.	4.70 chs.	On sloping bank about 8 ft. high. At 1.14 chs. fence W. side Levi T. Jessup's farm, bears N. 100° W. and S. 100° E.
S. 20 1/40 ° E.	7.50 "	Sloping bank about 8 ft. high.
S. 7 1/20 ° E.	4.30 "	Sloping bank 12 ft. high.
S. 25 1/20 ° W.	2.80 "	Line runs along foot of gravelly ridge about 40 ft. high. Bank about 20 ft. high. At 0.80 enter springs along the river bank and continues to end of course. River confined in a narrow channel sets strong

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of the left bank of the Rio Virgin, down stream.

against the E. bank.
 S. 42° W. 3.50 chs. At 0.15 ch. stream pure fresh water, about 2 ins. wide, 2 ins. deep, rises about 2.00 chs. E. and runs W. into river. At 0.80 ch. stream pure fresh water, about 2 ins. wide and 2 ins. deep, runs W. into river. At 1.50 chs. stream pure fresh water about 2 ins. wide and 1 in. deep runs W. into river. Leave foot of ridges bears S. 45° W. Bank about 15 ft. high.
 S. 65° W. 1.00 " To meander cor. fractl. secs. 1 and 2. Bank about 15 ft. high.

Land level and broken.

Soil, rich sandy and gravelly, and stony; 2nd. 3rd. and 4th. rate.

No timber except a few scattering cottonwoods.

Dense willow and rabbit brush undergrowth on 23.80 chs.

Mountainous land on 7.80 chs.

Thence in sec. 2.

Through dense willow undergrowth; over nearly level ground; in sandy gravelly and stony ground with indications of alkali.

S. 72° W. 12.00 chs. Sloping bank 6 ft. high. At 9.00 chs. leave dense willow undergrowth and enter scattering willows and weeds, bears N. & S.
 S. 86 1/2° W. 4.50 " Bank average about 6 ft. high.
 N. 84 1/2° W. 2.10 " Sloping bank about 8 ft. high.
 S. 72 1/2° W. 2.30 " Bank about 8 ft. high.
 S. 70° W. 9.10 "
 N. 62 1/4° W. 5.30 " At end of course line crosses foot of volcanic ledges; leave willows and weeds. Bank gradu-

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of the left bank of the Rio Virgin, down stream.

		ally slopes to edge of water N. about 4.00 chs. dist.
N. 73 I/2° W.	1.40 chs.	At end of course leave foot of volcanic ledges bears S.W.
S. 74 I/2° W.	1.20 "	At 0.98 ch. road from Berry Spring and Virgin City to Washington at foot of volcan- ic bench, ascend S. 15° E. to top of bench, and bears N. 40° E. across river about 5.00 chs. and thence N.W.
S. 59 I/2° W.	4.50 "	Top of sand bank E. side of river about 8 ft. high.
S. 30° E.	2.90 "	At end of course foot of per- pendicular volcanic ledges, about 50 ft. high. Bank of river about 6 ft. high. Thence along foot of volcanic ledges on stony beach.
S. 17° W.	3.40 chs.	
S. 39 I/4° W.	3.40 "	Scattering brush and weeds along this course.
S. 37 I/2° W.	5.50 "	
S. 42 I/2° W.	10.00 "	
S. 46 I/2° W.	11.00 "	At 9.30 chs. trail ascends bank from river S. 20° W. At end of course leave foot of ledges bears S. 20° W. and enter dense willow undergrowth.
S. 39 I/2° W.	4.40 "	
S. 20 I/2° W.	5.60 "	
S. 6° W.	2.90 "	At 2.00 chs. cottonwood tree 6 ins. diameter on the line. Enter solid stone beach and leave dense willows, bears S. 20° W. and N. 20° E.
S. 28 3/4° W.	2.30 "	At end of course enter foot of perpendicular ledges bears S. 30° W., thence along steep foot of ledges, about 10 ft. above the water.

Meanders, T.42 S., R.14 W.-Continued.

Meanders of the left bank of the Rio Virgin, down stream.

S.30 $1/20$ W. 5.80 Chs. To meander cor. fractl. secs. 2 and 11. The river sets strongly against the stony bank the entire course.

Land along foot of ledges broken and stony; in river bottom rich sandy, gravelly soil nearly level with indications of alkali; 4th. and 2nd. rate.

No timber except lone cottonwood.

Dense willow undergrowth on 21.00 chs.

Mountainous land on 43.70 chs.

Thence in sec. 11.

June 16, 1899: At the meander cor. of fractl. secs. 2 and 11, I set off $23^{\circ} 23'$ N. on the decl. arc; and, at 12^h M., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ} 11'$ N.

Along sandy and stony beach at foot of ledges.

S.39 $1/40$ W. 9.10 chs. Sandstone beach about 8 ft. high. Current sets strong against the stony bank. At 6.00 chs. small spring drains W. into river.

S.38 $1/40$ W. 4.60 chs. At 0.50 ch. enter dense rabbit brush undergrowth, bears S.W. and N.E.; leave foot of ledges bears S.W.

S.20 $1/20$ W. 5.40 " To meander cor. fractl. secs. 10 and 11; on sandy beach, still in dense rabbit brush.

Land broken along foot of ledges; nearly level in river bottom.

Soil, stony along foot of ledges, and rich sandy soil in the river bottom; 4th. and 2nd. rate.

No timber.

Dense undergrowth on 9.50 chs.

Mountainous land on 9.60 chs.

99.60
64.70
34.90

19.10

Meanders, T.42 S., R.14 W.-Continued.

Meanders of left bank of Rio Virgin, down stream.

From the meander cor. of fractional secs. 10 and 11,
I run with meanders in sec. 10.

Over broken sandy and stony ground; through dense
rabbit brush and willow undergrowth. On sloping bank
about 6 ft. high.

S. 27° W. 1.70 chs.

S. 32 1/4° W. 7.40 " At 0.40 ch. leave dense willow
and rabbit brush under-
growth, bears N.E. and S.W.;
and enter foot of almost per-
pendicular ledges. At 5.40 en-
ter dense willow and rabbit
brush undergrowth, bears E. and
W. At end of course leave dense
undergrowth bears N. and S.
On stony bank 6 ft. high.

S. 33 1/4° W. 7.80 " At 1.61 under projecting ledges
about 60 ft. high. The line con-
tinues along a narrow shelf of
solid ledges, about 20 ft. high,
with current strong against
stony bank.

S. 45 1/20 W. 6.10 " Still on ledges-current strong
against the bank.

S. 49 3/40 W. 6.80 " At 0.55 ch. leave ledges bears
S. 45° W.; enter sandy beach and
scattering cottonwoods. Line
continues along narrow sandy
beach. At 6.10 chs. re-enter
ledges bears S. 55° W. and N.E.

S. 57° W. 11.70 chs. Along foot of ledges with cur-
rent strong against stony bank.
At 5.40 leave foot of ledges
bears S.W. thence on sandy, and
gravelly beach. At end of course
stone fence bears N. 60° E.
about 1.00 ch., and S. 60° W. to
top of ridge.

S. 24 1/40 W. 3.40 " At 0.40 enter dense willow and

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of left bank of the Rio Virgin, down stream.

and greasewood undergrowth,
bears N. and S.

S. 4 I/40 E. 2.70 Chs. On caving bank about 15 ft.
high, and W. side of old farm in
river bottom.

S. 22 I/40 W. 3.00 chs. At beginning of course leave
dense willows and greasewood
bears N. E. and S. W.

S. 48° W. . 2.40 " At 0.40 ^{ch.} enter dense willow
undergrowth bears N. and S. At
1.10 chs. leave dense willow
undergrowth at foot of ledges
bears N. and S.; thence along
the ledges on bank about 5 ft.
high, with current strong
against the stony bank.

S. 34° W. 10.50 " At 0.70 ch. enter dense willow
undergrowth bears S. 30° W. and
N. 30° E. and leave ledges bears
S. 30° W. At 4.90 chs. leave
dense willows bears N. and S.
enter sandstone ledges. At 5.50
chs. enter dense willow under-
growth bears N. and S. At 6.20
leave dense willows bears N. and
S.; enter wire grass flat. At
6.90 leave wire grass, bears E.
and W.; enter stony bank at
foot of ledges. Thence along
broken sandstone reefs.

S. 44° W. 8.40 " At 1.65 leave ledges and enter
dense willows in sandy river
bottom bears N. and S. At 7.40
enter ledges and leave dense
willows and sandy river bottom
bears N. E. and S. W.

S. 45° W. 6.20 " At 0.70 ch. enter dense willows
in sandy river bottom, bears N.
and S.; thence along narrow

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of left bank of Rio Virgin, down stream.

80.10

bank at foot of ledges, about
4 ft. high, with current setting
strong against the stony
bank.

S. 40 $1/40$ W. 5.10 chs. At 0.70 ch. leave dense wil-
low undergrowth bears N. and S.
and enter dense rabbit brush
undergrowth, which continues to
end of course.

To meander cor. of fractl. secs.
10 and 15.

Land along ridges broken, and in river bottom nearly
level.

Soil, stony and sandy; 4th. and 2nd. rate.

No timber except small grove of cottonwoods.

Dense undergrowth on 36.00 chs.

Mountainous land on 32.00 chs.

June 16, 1899.

June 17, 1899: At 8^h a.m., 1.m.t., I set off 37° 10' N
on the lat. arc; 23° 24' 30" N. on the decl. arc; and de-
termine a true meridian with the solar, at the mean-
der cor. of fractl. secs. 10 and 15.

Thence I run with meanders in Sec. 15.

Through dense yellow or rabbit brush undergrowth,
over sandy and stony ground.

S. 38° W. 7.90 chs. At 2.90 chs. enter dense wil-
low undergrowth, bears N.E. and
S.W.; leave yellow or rabbit-
brush.

S. 35 $3/40$ W. 8.80 "

S. 41° W. 6.10 "

S. 50 $1/40$ W. 7.10 chs. At 6.60 chs. leave dense wil-
lows bears N.E. and S.W.; enter
sandstone ledges on stony
bank about 15 ft. high, with

Meanders, T.42 S., R.14 W.-Continued.

Meanders of left bank of Rio Virgin, down stream.

29.40

river current strong against the bank.

S.54 I/20 W. 9.24 chs. At 0.24 chs. leave sandstone ledges bears S.W.; thence over sandy beach in dense willow undergrowth to end of course. To the meander cor. of fractl. secs. 15 and 16.

Land broken along foot of ledges and nearly level in river bottom.

Soil, stony and sandy; 4th. and 2nd. rate.

No timber.

Dense willow or rabbit brush undergrowth on 38.40 chs.

Thence in sec. 16.

Over sandy and stony ground; through dense willow undergrowth.

S.470 55' W. 5.00 chs.

S.90 W. 1.90 " At 1.80 chs. fence on N.E. end of W.W. Roundy's pasture, bears N.100 W. and S.100 E.

S.140 E. 4.20 " End of course about 50 lks. S. of E. end of Wm.W. Roundy's and Wallace Pollock's dam in Virgin River. At end of course Roundy's pasture fence bears N.2.00 chs. and runs to beginning of course. Leave dense willows, bears E. and W.

S.27 I/20 W. 4.40 " Course along ledges on steep bank about 10 ft. high, with river current strong against stony bank.

S.160 W. 10.70 " At 1.50 chs. leave volcanic ledges bears S.; river emerges

39.14

38.40

0.74

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of left bank of the Rio Virgin, down stream.

26.20

from box canon and widens and spreads in bottom land. Thence over wire grass bottom, subject to overflow during floods of from 6 to 10 ins. Enter dense willow undergrowth bears N. and S. Scattering cottonwoods and black willow; also mosquito or thorn wood.

S. 28 $1/20$ W. 15.20 chs.

South 3.20 "

S. 250 W. 6.30 " On gravelly sandy beach.

S. 65 $1/20$ W. 1.20 "

S. 230 W. 2.20 " On bank about 8 ft. high, subject to overflow of about 8 ins. At end of course leave dense willows bears E. and W.

S. 19 $1/40$ E. 3.90 " To meander cor. of fractl. secs. 16 and 21.

Land broken ridges and almost level river bottom. Soil, stony on ledges, rich sandy and clay loam in river bottom with indications of alkali; 4th, 2nd, and 1st rate.

Timber, scattering cottonwood, black willow and mosquito or thorn wood.

Dense undergrowth on 48.40 chs.

Mountainous land on 5.90 chs.

June 17, 1899: At this meander cor. of fractl. secs. 16 and 21, I set off 230 24' N. on the decl. arc; and at 1 p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 9' N.

Thence in sec. 21

Over sandy-clay level bottom land on wire grass flat subject to overflow of about 12 ins.

S. 19 $1/40$ E. 5.70 chs. Bank about 2 ft. high.

Meanders, T.42 S., R.14 W.-Continued.

Meanders of left bank of Rio Virgin, down stream.

5.70

- S.30 I/2° W. 4.10 chs. At end of course enter dense willow undergrowth bears E. and W.
- S.5 I/2° E. 7.10 " At end of course on broken ridges or foot hills, bears N. 50° E. and S. 50° W.; thence along broken ridges on bank from 8 to 12 ft. high, with river current strong against the bank, which is protected with dense willows, black willow and cottonwoods.
- S.53 I/2° W. 1.70 "
- S.67 I/4° W. 7.00 chs. Still on sloping bank from 8 to 12 ft. high.
- S.45° W. 4.30 "
- S.42° W. 3.00 " At 1.00 ch. leave dense undergrowth at foot of ridge, bears S. 25° W., and enter stattering willows, cotton wood and black willow, in river bottom subject to overflow of from 12 to 18 ins. To locate a sand bar I run from end of course: N. 85° W. 2.50 chs. to upper end of bar.
- S.35 I/2° W. 9.00 . " At end of course foot of ridges S. side of river bottom bears S. At 1.75 chs. enter dense willow undergrowth bears N. and S.
- S.26 3/4° W. 9.20 " At end of course leave dense willow undergrowth, bears N.E. and S.W.
- S.57° W. 3.30 "
- N.60° W. 1.70 " At end of course enter dense willow undergrowth bears E. and W. To locate lower end of sand bar, I run N. 70° E. to end of bar 1.40 chs. dist.

Meanders, T.42 S., R.14 W.-Continued.

Meanders of the left bank of the Rio Virgin, down stream

- North 1.20 chs. Bank about 6 ft. high.
- S.62 $1/4^{\circ}$ W. 4.20 " Bank about 5 ft. high-river runs with rapid current.
- S.46 $1/4^{\circ}$ W. 2.20 " Sloping bank about 3 ft. high.
- S.19 $^{\circ}$ W. 7.20 " Sloping bank about 3 ft. high about 75 lks. from water.
- S.67 $3/4^{\circ}$ W. 2.50 " Course along sloping bank about about 6 ft. high, swift current of river sets strong against the bank.
- S.59 $^{\circ}$ W. 5.50 " Bank about 6 ft. high, rapid current.
- S.63 $1/4^{\circ}$ W. 5.70 " On low bank about 2 ft. high, subject to overflow of from 12 to 20 ins.; leave dense willow undergrowth at end of course, bears N. and S.
- S.51 $3/4^{\circ}$ W. 5.10 " At end of course stone butment running from Washington dam, protected with growing black willow timber, bears N.63 $^{\circ}$ W. and S.63 $^{\circ}$ E. Thence along the abutment through dense black willows.
- N.63 $1/4^{\circ}$ W. 6.50 " At 6.20^{chs.} head of Washington canal on E. side; leave willows At 6.40 chs. head of canal on W. side. The canal is about 10 ft. deep and filled with water from the Rio Virgin.
- N.85 $^{\circ}$ W. 0.40 " At end of course on butment of Washington dam.
- N.71 $1/4^{\circ}$ E. 0.40 " To N. end of butment built of solid masonry, and about 20 ft. high. N. of the butment is a spill cut in solid stone about 150 ft. long with current of river and about 250 ft. wide. The Washington dam

Meanders, T.42 S., R.14 W.-Continued.

Meanders of left bank of the Rio Virgin, down stream.

~~21.25~~
97.00

on S. side of spill, about 300 ft. long, about 40 ft. wide and 20 ft. high, built by citizens of Washington County at an estimated cost of from twelve to fifteen thousand dollars. The canal running from the dam carries water to irrigate tillable and pasture land in Washington field, in Tps. 42 & 43 S., R. 15 W.

N. 34° W. 0.60 chs. To W. end of abutment.

N. 76 3/4° W. 1.00 " To lower end of abutment on sand bank about 10 ft. high.

N. 88 3/4° W. 2.70 " At end of course in river bottom on bank about 5 ft. high. Rush and willows, along the course.

N. 67° W. 1.40 " To point for meander cor. of fractional secs. 20 and 21 at 9.10 chs. N. 00 4' E. of the witness cor. heretofore described.

102.70

72.25

30.45

Land nearly level in river bottom and broken along foot hills or ridges.

Soil, rich sandy clay and loamy, stony and gravelly;

1st., 2nd., and 4th. rates.

Timber, scattering cotton woods, mosquito or thorn wood, and black willow.

Dense undergrowth on 72.25 chs.

Mountainous land on 21.00 chs.

The land in the river bottom is occupied by Wm. W. Roundy and Wallace Pollock and used as a pasture.

June 17, 1899.

Meanders, T.42 S., R.14 W., -Continued.

Meanders of left bank of Rio Virgin, down stream.

June 19, 1899: At 8^h a.m., l.m.t., I set off 37° 9' N. on the lat. arc; 23° 27' N. on the decl. arc; and determine a true meridian with the solar, at the point for the meander cor. of fractional secs. 20 and 21, situated N. 0° 4' E. 9.10 chs. dist. from the witness cor. for this meander cor.

Thence I run with meanders in sec. 20.

Over nearly level rich sandy and gravelly soil; through dense willow undergrowth. Current of river sets strong against the bank, as it drops from spill

N. 67° W. 6.00 chs. At 3.40 chs. sluice channel, about 50 ft. wide, and 4 ft. deep, runs from Washington canal and empties into river. Course N. 20° W.

N. 83° E. 1.10 "

N. 44 3/4° W. 6.70 " Course along sandy bank about 6 ft. high.

N. 76 1/4° W. 7.20 " Course along sandy bank about 4 ft. high, subject to overflow of about 6 ins.

N. 82 1/2° W. 6.80 "

N. 70 1/2° W. 3.50 " Course along sandy shallow bank subject to overflow of from 10 to 20 ins. At end of course upper end of sand bar bears N. 22° W. 1.20 chs. dist.

N. 51 3/4° W. 12.00 " At 5.40 chs. lower end of sand bar, bears N. 28° E., 2.75 chs. dist. At 8.50 chs. leave dense willows and enter scattering willows bears N. and S.

N. 79 3/4° W. 5.10 " At 3.40^{chs.} cottonwood tree 36 ins diam. bears S. about 10 lks. dist. Enter dense willow undergrowth bears N. and S.

S. 71° W. 5.00 " At 2.40 chs. sluice ditch or channel from Washington canal on S. side of river bottom,

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of left bank of Rio Virgin, down stream.

53.00

about 20 ft. wide and 3 ft. deep,
drains N.W. into river. Leave dense
undergrowth and enter scattering
willows and rabbit brush.

Charles Westover's fence on N.
side of farm which bears N. 30° W.
and S. 30° E. is about 2.00 chs. S.
of end of course.

N. 55 1/4° W. 16.30 chs. At 1.10 chs. sluice channel
running from Washington canal
about 100 ft. wide and 2 ft.
deep, drains N.W. into river.
At 4.00 chs. road from Wash-
ington to farms in river bot-
tom and Virgin City, runs with
course along the river bank.
At end of course on sloping
bank about 8 ft. high.

N. 84 1/4° W. 15.10' " Sloping bank about 6 ft. high
subject to overflow of from
1 to 2 ft. At 10.33 enter
dense willow undergrowth bears
N. and S.

S. 55 3/4° W. 4.80 " At 2.80 chs. leave road bears
W. and crosses river.
To meander cor. fractl. secs.
19 and 20, which could not be
set, situated N. 0° 4' E. 22.30
chs. dist. from the witness
cor. established on S. side of
river bottom.

Land nearly level river bottom.

Soil, sandy, gravelly, clay and sandy and clay loam;
2nd. 3rd. and 1st. rate.

No timber except scattering cottonwoods.

Dense undergrowth on 50.47 chs.

June 19, 1899: At this point for meander cor. of fractl.
secs. 19 and 20, I set off 23° 27' " N. on the decl.
arc; and, at 0h 1m p.m., l.m.t., observe the sun on the

89.60

50.47
39.13

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of left bank of the Rio Virgin, down stream.
meridian; the resulting lat. is $37^{\circ} 9'$ N.

Thence in sec. 19.

Over nearly level sandy, gravelly beach; through dense willow undergrowth.

S. 55 $3/4^{\circ}$ W. 10.10 chs. At 4.70 chs. sluice channel, about 15 ft. wide and 2 ft. deep, runs from Washington canal, N. Westerly and enters river. At 8.10 sluice channel about 50 ft. wide and 3 ft. deep, runs from Washington canal and drains N.W. to river. End of course on sloping bank about 5 ft. high, 40 lks. from bed of river. N. side of Chas. Westover's field bears S. about 5.00 chs. dist.

S. 79 $1/2^{\circ}$ W. 7.00 "

S. 66 $1/2^{\circ}$ W. 13.40 " At 6.38 road from Westover's farm to residence, bears S. about 1.00 ^{ch} and enters field. At 9.00 chs. fence at foot of bank about 8 ft. high, bears N. E. and S. W. and enter field. At 11.10 chs. top of 8 ft. bank inside of field. Current of river sets strong against the bank, which is gradually wearing away. Leave dense willows bears N. and S.

N. 61 $1/2^{\circ}$ W. 4.80 " At 0.30 ch. leave field and fence bears E. and W.; enter sandy gravelly bed of sluice channel. At end of course leave sluice channel, bears N. W. and

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of left bank of Rio Virgin, down stream.

30.30

enter dense willow undergrowth and sandy gravelly soil bears N.W. and S.E.

N. 40 $1/2^{\circ}$ W. 10.20 chs. On bank about 20 ft. high with river current strong against the bank. At 10.00 chs. Leave dense willows

and enter scattering willows & cottonwoods bears E. and W.

N. 50 W. 5.80 " At 5.20 road on shallow bank at foot of high bank bears W. about 2.75 chs. to Westover's houses, and E. Subject to overflow of from 1 to 2 ft.

N. 26 $1/4^{\circ}$ W. 9.10 " At 0.20 ch. enter dense willow undergrowth bears N. and S.

N. 40 $1/2^{\circ}$ W. 9.70 "

N. 65 $1/2^{\circ}$ W. 4.90 " At 0.16 ch. Road from Washington to Berry Spring and Virgin City, bears E. and W.

S. 77 $1/4^{\circ}$ W. 28.00 " At 10.80 chs. on 6 ft. bank, sloping gradually about 2.50 chs. to edge of water at low water mark. At 18.70 chs. on steep sandy bank about 10 ft. high. Enter dense greasewood bears N. and S.; continue in dense willows. At 25.90 chs. road from Washington to Virgin City bears S. 77 $^{\circ}$ W. and N. 60 $^{\circ}$ E. At 26.15 chs. leave road bears S. 70 $^{\circ}$ W. At end of course on sloping bank about 3 ft. high subject to overflow of about 6 to 8 ins.

S. 51 $^{\circ}$ W. 6.90 " At 1.25 chs. road from Washington to Virgin City bears S. 70 $^{\circ}$ W. and N. 70 $^{\circ}$ E.

At 8.90 chs. Intersect W. bdy. of the Tp. at the point for meander cor. of fractl.

109.90

98.90
1100

Meanders, T.42 S., R.14 W.-Continued.

Meanders of left bank of the Rio Virgin, down stream.

secs.19 and 24, heretofore described in notes of retracement of W.bdy. of T.42 S., R.14 W., Book *B*, p. 10.

Land nearly level, slightly broken and rolling.

Soil, sandy, gravelly, and rich sandy and clay loam; with traces of alkali; 3rd. and 2nd. rate.

Timber, scattering cottonwood, black willow and ash.

Dense undergrowth on 98.90 chs..

Land in river bottom occupied by Charles Westover for pasturage, farming and gardening.

June 19, 1899.

MEANDERS OF THE RIGHT BANK OF THE RIO VIRGIN, UP STREAM.

June 20, 1899: At 8h a.m., 1.m.t., I set off 370' 9"

N. on the lat. arc; 230' 28" " N. on the decl. arc; and determine a true meridian with the solar at the meander corner of fractional secs. 19 and 24, on the N. bank of the Rio Virgin, at 64.00 chs dist., N. 0.0 40' W. from the cor. of secs. 24 and 25, T.42 S., R.15 W. and described in notes of retracement of W.bdy. of T.42 S., R.14 W., Book *B*, p. 10.

Thence I run with Meanders in sec. 19.

Over broken ridges at foot of high sandstone mountain; in sandy, stony gravelly soil; through dense greasewood and willow undergrowth.

N. 77° 25' E. 2.20 chs. Course along broken bank from 8 to 15 ft. high, with current of river strong against the bank.

N. 59° E. 9.00 " Course along broken bank from 8 to 12 ft. high-current strong against the bank.

N. 64 1/2° E. 15.00 " Course along broken caving

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of the right bank of the Rio Virgin, up stream.

20.20

bank, about 12 ft. high, with
current strong against the bank

N. 88 $\frac{3}{4}$ ° E. 8.00 chs.

S. 53° E. 9.50 chs. Course along caving bank about
12 ft. high. At end of course
leave broken ridges and foot
hills bears N. 40° E.; thence
over rolling and nearly level
river bottom.

S. 50 $\frac{1}{4}$ ° E. 10.30 chs. At 2.90 chs. road from Wash-
ington to Berry Spring and
Virgin City bears S. 70° W. and
N. 70° E. Road enters river at
about 25 lks. dist., S. 70° W.
Course along straight bank
diminishing from 12 ft. to
about 6 ft. high.

S. 38° E. 5.70 " Course along gradually slop-
ing bank about 5 ft. high.
At 0.70 chs. leave dense under-
growth and enter scattering
willows and cottonwoods bears
N. and S.

S. 11 $\frac{1}{4}$ ° E. 5.10 " At 0.10 ch. enter dense wil-
low undergrowth bears N. and S.
leave scattering willows.

S. 31 $\frac{1}{4}$ ° E. 13.90 " Course along sloping bank
about 3 to 4 ft. high, subject
to overflow of about 8 to 12
ins. At end of course leave
dense and enter scattering wil-
lows bears E. and W.

N. 73 $\frac{3}{4}$ ° E. 23.30 " Course along sandy gravelly
beach subject to overflow of
from 12 to 24 ins.
At end of course enter dense
willow undergrowth bears N. and
S.; leave scattering willows.
Enter foot of bench bear N.

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of right bank of Rio Virgin, up stream.

102.00

N. 60° E. and N. 30° W.; thence
along foot of broken bench.

N. 61° E. 5.90 " To the meander cor. of fractl.
secs. 19 and 20, heretofore de-
scribed in notes of subdivisions
Book C.

Land broken foot hills, rolling and nearly level.

Soil, sandy and stony, sandy and gravelly, and loamy;
4th., 3rd. and 2nd. rate.

Timber, scattering cottonwoods and very few black wil-
low.

Dense undergrowth on 79.50 chs.

Mountainous land on 35.70 chs.

Land in river bottom in East half of section mostly
occupied by George Prince for pasturage and farming
purposes.

June 20, 1899: At this meander cor. of fractl. secs.
19 and 20 on N. bank of the Rio Virgin, I set off 23°
27' N. on the decl. arc; and, at 0. h 1 m p.m., l.m.t.,
Observe the sun on the meridian; the resulting lat is
37° 09' 10" N.

107.90
79.50
28.40

Meanders, T.42 S., R.14 W.-Continued.

Meanders of right bank of Rio Virgin, up stream.

June 20, 1899: At the Meander cor. of secs. 19 and 20 on the N. bank of the Rio Virgin, I set off 370 9' 10" N. on the lat. arc; 230 27' N. on the decl. arc; and at 2^h p.m., l.m.t., determine a true meridian with the solar.

Thence I run with meanders in sec. 20.

Along sandy, gravelly broken foot of bench; through dense willow undergrowth.

N. 70 1/2° E. 6.70 chs. At 3.00 chs. leave dense willows and enter scattering willows bears N. and S. At 3.05 chs. road from Washington to river farms and Virgin City, bears S. 75° W. and N. 71° E.; thence along the road. At end of course leave foot of bench bears N. 65° E.; thence along almost level river bottom. Enter dense willow undergrowth bears N. and S.; leave scattering willows. Course along sloping bank average about 5 ft. high.

N. 88 1/2° E. 4.10 " Course along sloping bank averaging about 3 ft. high, subject to overflow of from 8 to 12 ins.

S. 72 3/4° E. 9.30 " Course along steep bank about 3 ft. high, subject to overflow of from 10 to 20 ins.

N. 61 1/4° E. 5.90 " At 0.45 ch. road bears N. 65° W. and S. 65° E. Course along steep bank about 2 ft. high, subject to overflow of from 12 to 20 ins. At end of course lower end of bar bears S. 38 1/2° E. 3.60 chs. dist.

N. 24 1/2° E. 2.10 " At 1.80 chs. wire fence S. side of Ormond Wilkin's field and

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of right bank of the Rio Virgin, up stream.

28-10

Pasture, bears N. 30° E. and N. 70° W.; enter field and leave dense willows.

S. 84 1/2° E. 4.40 chs. At 1.85 chs. wire fence S. side of field and pasture bears E. and W.; leave field. At 3.90 chs. S.E. cor. of Ormond Wilkins field and pasture bears N. about 30 lks. At end of course in lane bet. Wilkin's E. and W. fields and pastures.

S. 52 1/2° E. 8.10 " At 0.90^{ch.} S.W. cor. of Ormond Wilkin's field (East Enclosure), bears N.E. and S. 60° E. At 2.95 chs. Road bears S. 60° E. and N. 60° W. At 4.20 chs. S.E. cor. of E. field and pasture bears N. about 2.00 chs. Enter dense willows and rabbit brush bears N. and S.; also scattering cottonwoods and black willow. Course along sloping bank of from 3 to 8 ft. high.

S. 76° E. 7.20 " At end of course upper end of sand bar bears S. 15° W. 4.00 chs. dist.

S. 42 1/4° E. 2.90 " Course along sloping bank about 2 ft. high, subject to overflow of about 12 to 18 ins. At end of course leave dense rabbit brush bears E. and W.; continued in dense willows.

S. 78 1/2° E. 6.90 chs. Course along sloping bank about 3 ft. high, subject to overflow of from 12 to 24 ins.

S. 69 1/2° E. 3.00 " Course along steep bank from 3 to 5 ft. high subject to overflow of from 6 to 12 ins.

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of right bank of the Rio Virgin, up stream.

50.60

S. 55 $1/20$ E. 3.90 chs. Course along sloping bank about 5 ft. high.

S. 80 $3/40$ E. 5.70 "

N. 80 $3/40$ E. 2.40 " At end of course on foot of bench bears N. 200° W. and N. 800° E.; irrigation ditch bears N. about 25 lks.; enter dense greasewood and rabbit brush bears N. and S. - continue in dense willows.

N. 87 $3/40$ E. 6.00 " Course along broken foot of bench-bank about 5 to 8 ft. high.

S. 65 $1/40$ E. 5.40 ^{chs.} Course along irrigation ditch on broken river bank about 10 ft. high. End of course about 3 ft. S. of irrigation ditch.

S. 31° E. 1.70 chs. Course along steep bank averaging about 10 ft. high. At end of course irrigation ditch bears N. about 100 lks.

S. 57° E. 2.64 " To point for the Meander cor. of fractl. secs. 20 and 21, on W. bank of the Rio Virgin, at 30.40 chs. dist, N. 00° 4' E. from the cor. of secs. 20, 21, 28 and 29. See notes of subdivisions of this Tp., Book C.

Soil in river bottom, sandy and gravelly, and loamy; 2nd. and 1st. rate; along broken foot of bench sandy, gravelly and stony; 3rd. and 4th. rate.

Timber, scattering cottonwood and black willow.

Dense undergrowth on 78.24 chs.

June 20, 1899.

78.24
10.10

Meanders, T.42 S., R.14 W.-Continued.

Meanders of the right bank of the Rio Virgin, up stream.

June 21, 1899: At the Meander corner of fractl. secs. 20 and 21 on the N. bank of the Rio Virgin situated N. 0° 4' W. from the cor. of secs. 20, 21, 28 and 29, 30. 40 chs. dist., I set off 370 9' N. on the lat. arc; 23° 28' N. on the decl. arc; and, at 8h a.m., l.m.t., determine a true meridian with the solar.

Thence I run with meanders in sec. 21.

Along broken foot of bench and foot hills; through dense greasewood and willow undergrowth; in gravelly sandy stony ground at foot of bench, and sandy-loamy soil in river bottom.

S. 56 1/2° E. 4.50 chs. Course along steep bank about 8 to 12 ft. high. At end of course leave willows & greasewood.

S. 63° E. 5.00 " At 0.80 ch. Ormond Wilkin's and George Prince's irrigation ditch or canal, about 6 ft. wide and 4 ft. deep filled with water from the Rio Virgin drains N. 65° W. and follows the course of the Rio Virgin. At 3.05 chs. wagon road that crosses spill and dam bears N. 20° E. and joins main road at about 3.00 chs.; and S. 20° W. At end of course on side of spill of Washington dam, about 30 lks. N. of head of irrigation ditch or canal.

N. 44 1/2° E. 1.60 " Course along point of dam. At end of course Wallace Pollock's pasture fence bears N. E. about 50 lks.; Pollock's house bears N. 22 3/4° E. 8.00 chs. dist.; corral, stables etc. E. of house at foot of sandstone mountain. Thence along river bottom, on S.W. line of Pollock's pasture.

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of right bank of the Rio Virgin, up stream.

11.10

S. 82 1/2° E. 8.80 chs. Course along swampy river bottom, through thich rushes. End of course about 25 lks. S. of Pollock's pasture fence.

N. 58. 1/2° E. 5.10 " At 0.80 ch. pasture fence bears S. 85° E. about 60 lks. to cor. and N. 85° W. ; enter pasture. At 2.50 chs. fence bears N. 50° E. and S. 50° W. ; leave pasture. At 3.65 chs. middle of road from Pollock's residence to spring on S. side of river bottom bears N. 30° W. and S. 30° E. Gate opening into lane bet. pasture on W. and field on farm on E., bears N. 30° W. about 35 lks. dist. End of course about 70 lks. S. of field fence. Enter dense willow undergrowth bears N. and S. N. 46° E. 7.70 " End of course on sloping bank about 5 ft. high, and about 2.00 chs. S. of field fence.

N. 24 3/4° E. 4.20 " From end of course lower end of sand bar bears N. 49° E. about 1.00 chs. dist.

N. 19° E. 2.10 " Course along bank about 3 ft. high, subject to overflow of from 6 to 12 ins.

N. 46 3/4° E. 1.60 " At end of course upper end of sand bar bears S. 30° E. about 75 lks. dist.

N. 29 1/2° E. 1.70 "

N. 57 3/4° E. 2.40 "

N. 34 3/4° E. 2.50 "

N. 39 1/2° E. 1.90 "

N. 17° E. 2.80 "

N. 2 1/2° W. 1.20 "

53.10

N.7 I/2 ° E. I.40 "

At end of course Wm.W.Roundy's bars bet.field and pasture bears N.60° W.about 80

lks.dist. Enter scattering cot-
tonwoods&black willow, bearsN&S.

North . 0.90 ch.

At end of course road to
Roundy's farm and pasture and
through pasture and over bench
to Berry Spring bears E. and W.

N. 36° E. 2.80

At end of course road bears N.
85° E. and S. 85° W.; thence
along the road.

S. 88. I/20 E. 6.10

N.38 I/20 E. 7.70

At 2.72 chs. leave road bears
E. At end of course road
bears S. about 35 lks.

N. 22° E. 2.70

N.25 I/4⁰ W. 2.90

N. 7 1/2° W. . 5.60

N. 60° E. 2.00 ^{chs.} To Meander cor. of fractl. secs. 16

and 2I, as described in notes
of subdivisions of this Tp.-

See Book *C*, p. 100.

Land below the Washington dam is broken foot of bench and foot hills; above the dam nearly level with bank from 3. to 5 ft. high; with overflow of from 6 ins. to about 2 ft.

Soil, sandy gravelly and loamy with indications of alkali in river bottom; 4th. and 2nd. rate.

Timber, scattering cottonwood and black willow.

Dense undergrowth on 75.60 chs.

Land in river bottom occupied by WM.W.Roundy and

Wallace Pollock for pasturage and farming purposes.

June 21, 1899: At this Meander cor. of fractl. secs. 16

and 21, I set off 230 27' N. on the decl. arc; and, at

107

Meanders, T.42 S., R.14 W.-Continued.

Meanders of right bank of the Rio Virgin, up stream.

On 1st p.m., observe the sun on the meridian, the resulting lat. is $37^{\circ} 9' 30''$ N.

Thence in sec. 16.

Over nearly level river bottom, gradually ascending; through dense willow undergrowth, and scattering cottonwoods and black willow; in rich sandy and loamy soil, with some gravel and slight traces of alkali.

N. 6° E. 9.00 chs. End of course about 60 lks. E.

of Roundy's and Pollock's irrigation canal, in the road from farm to head of canal.

N. $23 \frac{3}{4}^{\circ}$ E. 10.40 " End of course about 25 lks. E. of irrigation canal, on E. side of road.

N. 28° E. 4.20 "

N. $39 \frac{3}{4}^{\circ}$ E. 5.50 " At 3.00 chs. leave dense willows bears N. and S.; enter scattering willows and weeds. At end of course irrigation canal bears W. about 1.50 ch. Road runs along foot of canal.

N. $35 \frac{1}{2}^{\circ}$ E. 3.80 " End of course about 2.00 chs. E. of canal.

N. 31° E. 5.90 " End of course about 2.60 chs. E. of irrigation canal, and about 50 lks. E. of road.

N. $21 \frac{3}{4}^{\circ}$ E. 3.00 "

N. $15 \frac{1}{2}^{\circ}$ E. 3.70 " At 0.30 enter road bears N. 16° E. and S. 16° W.; thence along the road. At 0.80 leave road bears N. 20° E. At 1.80 chs. enter dense willows bears E. and W. At end of course about 1.75 chs. E. of irrigation canal.

Meanders, T. 42 S., R. 14 W.-Continued.

Meanders of right bank of Rio Virgin, up stream.

- N. 9 1/2 ° E. 4.20 chs. At 3.15 chs. sluice ditch about 4 ft. wide and 4 ft. deep drains S. into river. End of course on solid stone bank of canal, size of canal at this point about 5 ft. wide and 10 ft. deep cut into solid stone; thence along broken ledges.
- N. 22° W. 1.10 chs. End of course at foot of sandstone reefs on W. side of dam. At head of irrigation canal.
- N. 16° E. 3.20 " Course along sandstone reefs, on bank about 8 ft. high.
- N. 23° E. 4.60 " At 0.50 ch. enter dense willow undergrowth bears N. and S. At 4.00 chs. leave sandstone reefs bears N. 20° E. At end of course enter dense greasewood bears N. and S.; still in dense willows.
- N. 62° E. 4.40 " To the meander cor. of fractl. secs. 15 and 16, heretofore described in notes of subdivisions of this Tp., Book C

Land nearly level on first eight courses; bank from 3 to 5 ft. high; subject to overflow of from 6 to 12 ins. Along the remaining courses the bank is somewhat broken and rolling, running near the foot of the mountain, subject to overflow of from 6 to 8 ins. Bank averages about 7 ft. high-the highest bank being near the dam.

Soil, sandy-loamy, gravelly and stony; 2nd, 3rd, and 4th. rate. Indications of alkali along the river bottom. Timber, scattering cottonwood and black willow. Dense undergrowth on 37.00 chs.

Land along the river bottom is used by Wm. W. Roundy and Wallace Pollock for farming and pasturage.

June 21, 1899.

Meanders, T.42 S., R.14 W.-Continued.

Meanders of right bank of the Rio Virgin, up stream.

June 22, 1899: At 9h a.m., l.m.t., I set off 370 10' N. on the lat. arc; 230 27' N. on the decl. arc; and determine a true meridian with the solar, at the meander cor. of fractl. secs. 15 and 16 on the N. bank of the Rio Virgin, heretofore described.

Thence I run with meanders in sec. 15.

Along nearly level sandy, gravelly bank; through dense greasewood and willow undergrowth; and scattering cottonwoods, black willow and mosquito or thorn wood.

N. 56 1/4° E. 2.70 chs. Bank about 3 ft. high.

N. 61 1/4° E. 2.00 " Foot of mountain bears N. 300 W. about 3.00 chs.

N. 52 1/4° E. 5.00 " Bank about 4 ft. high. Foot of mountain bears N. 50° W. about 1.20 chs.

N. 47° E. 7.80 " Bank about 3 ft. high.

N. 39 3/4° E. 4.60 "

N. 29 1/4° E. 4.60 " At end of course foot of mountain bears N. 60° W. about 50 lks. dist.

N. 35° E. 3.40 " At end of course foot of mountain bears N. 55° W. about 20 lks. dist. Bank about 3 ft. high.

N. 40 3/4° E. 4.10 " To the meander cor. of fractl. secs. 10 and 15, at N. 69° 48' W., 56.42 chs. dist., from cor. of secs. 10, 11, 14 and 15, as described in notes of subdivisions of this Tp., Book C

Land nearly level along narrow river bottom.

Soil, rich and sandy with some gravel; 2nd. rate.

Timber, scattering cottonwood, black willow and mosquito or thornwood.

Dense undergrowth on 34.60 chs.

Meanders ,T.42 S.,R.14 W.-Continued.

Meanders of right bank of the Rio Virgin,up stream.

From the meander cor.of fractl.secs.10 and 15,heretofore described,I run with meanders in sec.10.

Along narrow river bottom over nearly level ground, in rich sandy-gravelly soil;through dense willow and greasewood undergrowth.

N.40 $3/4^{\circ}$ E. 4.30 chs. Sloping bank about 3 ft.high, near foot of high sandstone mountain.At end of course leave cottonwood,black willow and thornwood timber bears N.and S..

N.35 $^{\circ}$ E. 1:80 "

N.47 $3/4^{\circ}$ E. 9.70 " Foot of mountain bears N.45 $^{\circ}$ W.about 2.00 chs.dist.

N.45 $1/2^{\circ}$ E. 4.90 " Foot of mountain bears N.W. about 1.30 chs.dist.At end of course leave dense willows and greasewood bears N.and S. Enter scattering willows.

N.38 $3/4^{\circ}$ E. 5.50 " At 3.50 chs.enter dense willows and leave scattering willows bears N.and S.

Foot of mountain bears N.50 $^{\circ}$ W.about 1.50 chs.dist.

N.29 $3/4^{\circ}$ E. 4.20 " At 3.40 chs.leave sandy-gravelly beach,bears N.and S.;enter broken stony beach. At end of course on stony beach about 2 ft.above the river bed.

N.24 $3/4^{\circ}$ E. 5.70 " End of course about 1.00 ch. from foot of mountain,on stony gravelly beach.

June 22,1899:At this point on the meander line,I set off 23 $^{\circ}$ 27' N.on the decl.arc;and,at 0h 2m p.m.,1.m.t,observe the sun on the meridian;the resulting lat. is 37 $^{\circ}$ 10' 30" N.

I continue with meanders in sec.10.

Through scattering black willows and cottonwoods.

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of right bank of the Rio Virgin, up stream.
Sec 10

N. 23 $1/2^{\circ}$ E. 7.00 chs. At end of course on rocky broken foot of mountain, - bank about 6 ft. high. Thence along rocky broken foot of mountain. Leave willows.

N. 36 $1/2^{\circ}$ E. 3.10 " Stony bank about 8 ft. high.

N. 55 $1/4^{\circ}$ E. 8.70 " At 0.70 enter dense willows and greasewood undergrowth bears N. and S. Leave foot of mountain bears N. 50 $^{\circ}$ E. Thence along sandy, gravelly and stony bank about 10 ft. high.

N. 51 $1/2^{\circ}$ E. 7.80 " Foot of mountain about 25 lks. to left. Bank about 10 ft. high.

N. 47 $^{\circ}$ E. 4.80 " End of course on large boulder at foot of mountain; leave dense undergrowth bears N. and S.; thence along broken ledges at foot of mountain.

N. 37 $^{\circ}$ E. 5.70 " Bank about 6 ft. high. At end of course leave foot of mountain, bears N. 35 $^{\circ}$ E. Enter dense willows bears N. and S.

N. 31 $1/4^{\circ}$ E. 10.50 " Course along steep bank, gradually increasing from 6 to about 10 ft. high. Foot of mountain bears to left about 50 lks. dist.

N. 27 $^{\circ}$ E. 8.50 " At 5.00 chs. cross point of foot of mountain. Course along steep bank gradually decreasing from about 10 ft. to 4 ft. high.

To the meander cor. of fractl. secs. 10 and 11, on right bank of river, heretofore described in notes of subdivisions of

92.20
 79.20
 3.00

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of right bank of the Rio Virgin, up stream.

this Tp., Book C.

Land level river bottom and broken foot of mountain.

Soil, sandy and gravelly and stony; 2nd. and 4th. rate.

Timber, scattering cottonwood, black willow and mosquito or thornwood.

Dense undergrowth on 79.20 chs.

Mountainous land on 22.30 chs.

Thence in sec. 11.

Over broken and level sandy, gravelly beach; through dense greasewood and willow undergrowth.

N. 37° 05' E. 11.44 chs. To the meander cor. of fractl.

secs.

2 and 11, heretofore described in notes of subdivisions of this Tp., Book C.

Land slightly broken, and level.

Soil, sandy and gravelly; 2nd. and 3rd. rate.

No. timber.

Dense undergrowth on 11.44 chs.

June 22, 1899.

June 23, 1899: At 10^h a.m., l.m.t., I set off 37° 11' 20" N. on the lat. arc; 23° 27' N. on the decl. arc; and determine a true meridian with the solar, at the Meander cor. of fractl. secs. 2 and 11 heretofore described.

Thence I run with meanders in sec. 2.

Over sandy, gravelly beach; through dense greasewood and willow undergrowth.

N. 39 3/4° E. 4.10 chs. On sloping bank about 50 lks.

from foot of mountain.

N. 20° E. 13.50 " At 9.50 enter broken ledges

Meanders, T. 42 S., R. 14 W. - Continued.

Meanders of right bank of the Rio Virgin, up stream.

17-50

on foot of mountain and leave
leave dense undergrowth bears N.
N. and S.; thence over broken
ledges and large boulders.

N. 37 $\frac{3}{4}$ ° E. 8.90 chs.

N. 50 $\frac{1}{4}$ ° E. 11.10 " At 3.00 chs. leave foot of
mountain bears N.E., and en-
ter dense willow undergrowth,
bears N. and S. At end of course
foot of mountain bears to
left about 1.50 chs.

Bank about 3 ft. high.

N. 48 $\frac{1}{4}$ ° E. 5.50 " Bank about 5 ft. high. Foot
of mountain bears N.W. about
2.00 chs. dist. from end of
course. Leave willows and en-
ter heavy weeds bears N. and S.

N. 24 $\frac{1}{2}$ ° E. 7.40 " At 5.80 Road from Washington
to Berry Spring and Virgin
City bears N.W. and S.E.
At end of course bank about
6 ft. high; mountain foot about
75 lks. to left.

N. 22° E. 12.70 " At end of course enter broken
ledges at foot of mountain.

N. 33 $\frac{1}{2}$ ° E. 0.80 " On broken stony bank at foot
about 6 ft. high.

N. 22 $\frac{1}{2}$ ° E. 1.50 " At 1.00 ch. leave foot of led-
ges and mountain bears N. 200°
E. At end of course fence on
S.W. cor. of field and pasture
bears S. 81° E. and N. 200° W.

June 23, 1899: At this point on the meander line, I set
off 23° 26' N. on the decl. arc; and, at 0h 2m p.m., 1.m.
t., observe the sun on the meridian; the resulting lat.
is 37° 11' 50" N.

I continue with meanders in sec. 2.

Along nearly level sandy gravelly bank, about 5 ft.
high, on S. side of pasture and field fence.

Meanders, T. 42 S., R. 14 W.-Continued.

Meanders of right bank of the Rio Virgin, up stream.

S. 80 $1/2^{\circ}$ E. 5.00 chs.

N. 86 $3/4^{\circ}$ E. 17.80 " At 2.10 chs. leave fence bears N.E. Enter dense willows bears N. and S.

At 9.10 chs. leave dense willows bears N. and S.; enter scattering willows and rabbit brush, also scattering cottonwood timber.

N. 75 $1/2^{\circ}$ E. 5.50 "

N. 89 $^{\circ}$ E. 3.50 " Bank about 3 ft. high. At end of course leave rabbit brush bears N. and S.

N. 78 $3/4^{\circ}$ E. 8.40 " To the meander cor. of fractl. secs. 1 and 2, being also the witness cor. of secs. 1, 2, 35 and 36, as described in notes of subdivisions of this Tp., Book C ,

Thence I continue with meanders in sec. 2.

Over nearly level sandy, gravelly beach; through scattering willows, cottonwoods and black willow.

N. 14 $1/4^{\circ}$ W. 18.30 chs. To the meander cor. of fractl. secs. 2 and 35 on the N. bdy. of the Tp., heretofore described in the notes of retracement of N. bdy., Book B ,

Land, broken along foot of mountain and nearly level in the river bottom.

Soil, sandy, gravelly and stony; 2nd, 3rd, and 4th. rate. Indications of alkali along the beach.

Dense undergrowth on 3820 chains.

Mountainous land on 1770 chains.

Land in E. part of section occupied by Mr. Workman for pasturage and farming purposes.

Scattering cotton wood and black willow timber along the river bottom.

June 23, 1899.

Meanders, T. 42 S., R. 14 W. - Continued.

GENERAL DESCRIPTION.

This township is mountainous and broken, being made up principally of high mountain ranges, broken ridges and foot hills, with narrow valleys between the mountain ranges, and having a general slope and drainage toward the Rio Virgin.

The Rio Virgin enters the N. bdy. of the township at the N. E. cor. of sec. 2, and drains on a general South-westerly course through secs. 1, 2, 11, 10, 15, 16 and 21, and thence North-westerly across sections 20 and 19, crossing the West boundary of the township, about 20.00 chs. S. of the N. W. cor. of sec. 19.

Through Townships 42 and 43 S., the line runs across the top of high sandy and sandstone mountains on the East, and broken ridges and foot hills on the West.

Unlimited quantities of gypsum and an abundance of fire clay and limestone are found in the township; and there is also some good building stone along the mountain ranges and foot of ridges.

Traces of silver and copper ores are visible in secs. 1, 7, 8, 17 and 18; and I herewith return the S. E. $1/4$ of sec. 5, S. E. $1/4$ of sec. 7, E. $1/2$ and the S. $1/2$ of S. W. $1/4$ of sec. 8, N. W. $1/4$ of sec. 17, and N. E. $1/4$ of sec. 18 as mineral land.

Along the burnt sandstone and granite ranges of mountains which parallels the Rio Virgin, and which might be appropriately termed the "Virgin Range", there are some fine specimens of petrified wood, conglomerates and pudding stones; and on top of the sandstone mountain in the S. central and S. E. part of the township are many specimens of volcanic marbles or pebbles of various combinations shapes and forms.

The river bottom soils are generally rich sandy gravelly and loams, with slight indications of alkali along the beach; on the low benches and foot hills and in the narrow valleys there are some good sandy clay and loamy soils, generally intermixed with gravel; and on the mountains, ridges and foot hills the ground is generally sandy, stony and gravelly.

There is no timber except in the river bottom,

Meanders, T. 42 S., Range 14 W.-Continued.

which consists of scattering cottonwood, black willow, mosquito or thornwood, and very little ash.

An abundance of willow undergrowth, greasewood and rabbit brush covers the ground in the river bottom, greasewood, sage, iron wood and cactus grows on the mountains, ridges, foot hills and in the valleys; and wire grass and water rush is found along the river bottom in sections 19, 20 and 21, with other native grasses and shrubbery in sufficient quantities on the mountains, ridges, low benches, foot hills and in the narrow valleys. When supplied with sufficient moisture, vegetation grows very prolific the year round. Owing to the mild climate this township affords excellent ranges for horses, cattle and sheep, especially during the winter season.

Canada, sour dock or tanning root grows prolific in its native state in sections 24, 25, and 36, and also in the river bottom in S.W. 1/4 of sec. 21.

Berry Spring in section 1 is a medium size spring of pure cold water emerging from the foot of volcanic ledges; there is also another spring of cold clear water about the same size as the Berry Spring emerging from the foot of the sandstone ledges on the S. side of the river bottom in sec. 21, which supplies the settlers for domestic purposes on the N. side of the river; Grape Vine Spring in the S.W. 1/4 of section 6, is also a nice sized spring of clear cold water. Willow spring in sec. 18 runs about 10 gallons per minute. The water is pure and healthful. There are a number of other small springs along the river bottom. The water from these springs is slightly impregnated with alkalines.

Most of the available lands along the river bottom is occupied by settlers and used for pasturage and farming purposes, and also for the growing of fruits and vegetables.

Levi T. Jessup has two rock cabins in sec. 1, and occupies nearly all the available land in this sec. for orchard, garden, farm and pasture, and has a part of the land fenced. His improvements are worth about \$150.00.

Meanders, T. 42 S., R. 14 W. - Continued.

Mr. Workman has a cabin with corralls etc. in sec. 2, with farm and pasture of about 20 acres enclosed with brush and picket fence; also a small garden and orchard, which takes in nearly all the agricultural land in this section. His improvements are of the value of about \$250.00.

William W. Roundy has a two story stone building known as the Vermillion House in the N.W. 1/4 of sec. 21, with corralls, stables, stackyard etc., valued at about \$800.00.

Wallace Pollock has a frame house with corralls, stackyard etc. in S.W. 1/4 of sec. 21 of the value of about \$150.00.

All the available land in the river bottom in section 21 is fenced and occupied under joint enclosures by William W. Roundy and Wallace Pollock for farming, gardening fruit culture, pasturage etc. The land is irrigated from a joint canal which heads at their dam near N.E. 1/4 sec. cor. Sec. 16 and runs S. Westerly along the head of their farms about 80.00 chains. Their joint improvements are worth about \$1500.00.

The river bottom land in E. 1/2 of sec. 20 is used by Wallace Pollock for pasturage.

The land in the river bottom in sec. 20 on N. side of the Rio Virgin is occupied by Ormond Wilkins for farming and pasturage; his improvements consisting of small cabin, fenced and cultivated lands and interest in joint canal, which heads at the Washington dam, are worth about \$350.00.

George Prince occupies the river bottom land in E. 1/2 of sec. 19, on N. side of the river. His improvements consisting of small stockade cabin, fencing, cultivation, irrigation ditches etc., and interest with Ormond Wilkins in joint canal are worth about \$250.00.

In W. 1/2 of sec. 20 and in sec. 19 on S. side of the river, in the river bottom and on the low bench, the land is occupied by Charles Westover for farming, pasturage gardening and fruit culture. His improvements, consisting of dwelling houses, corralls,

stables, stackyard, orchard etc., fencing and ditches, are of the value of about \$100.00.

The Washington dam in secs. 20 and 21 and canal which heads near the S.W. cor. of sec. 21, and runs Westerly across secs. 20 and 19, was constructed by a company of Washington County citizens known as St. George and Washington Canal Company, at a cost of about \$35,000.00 for dam, ditches, flumes, gates, canal etc.

In Alowis Bauer Jr's Desert Land Entry in secs. 7 and 8, there is about 8 or 10 acres of land fenced and prepared for cultivation with ditches, dams and reservoir used in connection therewith of the value of about \$100.00.

Bauer also has a dwelling house with fenced field and pasture, irrigation ditches etc. in section 5, of the value of about \$150.00.

There is an old rock cabin at what is known as Grape Vine Spring in S.W. 1/4 of sec. 6 of the value of about \$50.00, claimed by Stephen Walker.

June 23, 1899.

Mayhew H. Galley
U.S. Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Mayhew H. Dalley
 _____, United States Deputy Surveyor, to assist in running, measuring, and
 marking the lines and corners described in the foregoing field notes of the survey of the Meander
Lines of Township No. 42 South, Range No. 14 West, of the Salt Lake Base
and Meridian, in the State of Utah.
 showing the respective capacities in which they acted:

Albert C. Dalley _____, Chainman.

Max Woodbury _____, Chainman.

Daniel S. Macfarlane _____, Moundman.

David Dix _____, Moundman.

Daniel S. Macfarlane _____, Axman.

David Dix _____, Axman.

Heber Dalley _____, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Mayhew H. Dalley

_____, United States Deputy Surveyor, in surveying all
 those parts or portions of the Meander Lines of Township No. 42 South, Range
No. 14 West,

_____ of the Salt Lake
Base and _____ meridian, in the State of Utah _____, which are represented
 in the foregoing field notes as having been surveyed by him and under his direction; and that said survey
 has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
 corner monuments established, according to the instructions furnished by the United States Surveyor
 General for the State of Utah.

Max Woodbury _____, Chainman.

Albert C. Dalley _____, Chainman.

Daniel S. Macfarlane _____, Moundman.

David Dix _____, Moundman.

Daniel S. Macfarlane _____, Axman.

David Dix _____, Axman.

Heber Dalley _____, Flagman.

Subscribed and sworn to before me this 21st
 day of July, 1899



My Commission Expires
 March 20th, 1903

Senora C. Dalley
 Notary Public, Iron County, Utah.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dalley, United States Deputy Surveyor,
solemnly swear that, in pursuance of a contract received from Jacob B Blair
United States Surveyor General for the State of Utah, bearing date of
23rd day of January, 1899, I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Surveyor
General for the State of Utah, the Manual of Surveying Instructions, and the laws of
United States, surveyed all those parts or portions of: the Meander Lines of
Township No. 42 South, Range No. 14 West, of the Salt Lake Base and
Meridian,

of the
Meridian, in the State of Utah, which are represented in
the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly
swear that all the corners of said survey have been established and perpetuated in strict accordance
with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor
General for the State of Utah and in the specific manner described in the field notes, and
the foregoing are the original field notes of such survey; and should any fraud be detected, I will
incure the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Mayhew H. Dalley,
United States Deputy Surveyor.

Subscribed by said Mayhew H. Dalley, and sworn to before me }
this 31st day of May 1901 #44 1900.



Edward H. Anderson
U. S. Surveyor General for Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, April 17, 1902
The foregoing field notes of the survey of the Meander Lines of Township
42 South, Range 14 West of the Salt Lake Base and
Meridian, Utah

executed by Mayhew H. Dalley
under his contract No. 224, dated January 23, 1899, having
critically examined, and the necessary corrections and explanations made, the said field notes, and
surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in
the State of Utah, has been correctly copied from the original notes on file in this office.

United States Surveyor General

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Mayhew H. Dalley

_____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the Subdivisions of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah, showing the respective capacities in which they acted:

Albert C. Dalley, _____, *Chainman.*

Heber Dalley, _____, *Chainman.*

Daniel S. Macfarlane, _____, *Moundman.*

David Dix, _____, *Moundman.*

Daniel S. Macfarlane, _____, *Arman.*

Henry Houchen, _____, *Arman.*

David Dix, _____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Mayhew H. Dalley

_____, United States Deputy Surveyor, in surveying all those parts or portions of the Subdivisions of Township No. 42 south, Range No. 14 West

_____ of the Salt Lake Base and _____ meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the monuments established, according to the instructions furnished by the United States Surveyor General for the State of Utah.

Albert C. Dalley _____, *Chainman.*

Heber Dalley _____, *Chainman.*

Daniel S. Macfarlane _____, *Moundman.*

David Dix _____, *Moundman.*

Daniel S. Macfarlane _____, *Arman.*

Henry Houchen _____, *Arman.*

David Dix _____, *Flagman.*

Subscribed and sworn to before me this 21st.

day of July, 1899.



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public, Iron County, Utah.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dalley, United States Deputy Surveyor,
solemnly swear that, in pursuance of a contract received from Jacob B. Blair
United States Surveyor General for the State of Utah, bearing date
23rd day of January, 1899, I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Surveyor
General for the State of Utah, the Manual of Surveying Instructions, and the laws of the
United States, surveyed all those parts or portions of the Subdivisions of Township
No. 42 South, Range No. 14 West

_____ of the Salt Lake
Base and meridian, in the State of Utah, which are represented in the
foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly
swear that all the corners of said survey have been established and perpetuated in strict accordance with
the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor
General for the State of Utah and in the specific manner described in the field notes, and that the
foregoing are the original field notes of such survey; and should any fraud be detected, I will incur
the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Mayhew H. Dalley
United States Deputy Surveyor

Subscribed by said Mayhew H. Dalley, and sworn to before me }
this 31st day of May 1901 #1899 1900.



Edward H. Anderson
U. S. Surveyor General for Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah April 17 1902

The foregoing field notes of the survey of the subdivisions of Township
42 South Range 14 West of the Salt Lake Base and
Meridian, Utah

executed by Mayhew H. Dalley
under his contract No. 224, dated January 23, 1899, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the
surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in
_____, has been correctly copied from the original notes on file in this office.

United States Surveyor General

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BOOK A-282

FIELD NOTES

OF THE SURVEY OF THE

OF THE RETRACEMENTS OF

SUBDIVISIONS

OF

TOWNSHIP NO. 42 SOUTH, RANGE NO. 14 WEST,

Of the SALT LAKE BASE AND Meridian,

IN THE STATE OF UTAH.

AS SURVEYED BY

Mayhew H. Dalley, United States Deputy Surveyor,

under his Contract No. 224, dated January 23rd, 1899

commenced June 7, 1899

completed June 15, 1899

6-151

Retracement from 2 28 58 1
Recovery high 1-64 58 1
" of them 14-96 1

NAMES AND DUTIES OF ASSISTANTS.

Albert C. Dalley, Chainman.

Heber Dalley, Chainman.

Daniel S. Macfarlane, Moundman.

David Dix, Moundman.

Daniel S. Macfarlane, Axman.

Henry Houchen, Axman.

David Dix, Flagman.

BOOK A-282

INDEX DIAGRAM

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25	26	27	28	29	30
31	32	33	34	35	36

Meanders Page _____

PRELIMINARY OATHS OF ASSISTANTS.

WE, Albert C. Dalley and Heber Gammon,

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will lay chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same we will report the true distances to all notable objects, and the true lengths of all lines that we measuring, to the best of our skill and ability, and in accordance with instructions given us, in the Retracements of Subdivisions of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah.

Albert C. Dalley, Chain.
Heber Dalley, Chain.

Subscribed and sworn to before me this 12th }
day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley,
Notary Public.

WE, Daniel S. Macfarlane and David Dix,

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the Retracements of Subdivisions of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah.

Daniel S. Macfarlane, Moundman.
David Dix, Moundman.

Subscribed and sworn to before me this 12th }
day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley,
Notary Public.

WE, Daniel S. Macfarlane and Henry Houchens,

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of and other duties, according to instructions given us, to the best of our skill and ability, in the Retracements of Subdivisions of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah.

Daniel S. Macfarlane,
Henry Houchens,

Subscribed and sworn to before me this 12th }
day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley,
Notary Public.

I, David Dix,

do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability in the Retracements of Subdivisions of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah.

David Dix, Flagman.

Subscribed and sworn to before me this 12th }
day of May, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley,
Notary Public.

Retracement of Subdivisions of T.42 S., R.14 W.

Chains. RetrACEMENTS commenced June 7, 1899, and executed with a W. and L. E. Gurley Light Mountain Solar Transit for description of which see notes of the S. bdy. of T.42 S., R.14 W. Book A
For complete test of solar apparatus see notes of S. bdy. of T.42 S., R.14 W. Book A

Knowing from retracement of exterior and survey of subdivisions closing on S. bdy. of secs. 3 and 4 that the lines of these secs. will not close, I retrace the line bet. secs. 3 and 4 as follows:

June 7, 1899: At the old cor. of secs. 3, 4, 33 and 34 on the N. bdy. of this Tp., heretofore described in the notes of retracement of the N. bdy. of the Tp., Book B

, At 10h a.m., 1st. 1., I set off 370 12' N. on the lat. arc; 22° 48' N. on the decl. arc; and determine a true meridian with the solar. Thence I run S. bet. secs. 3 and 4 on retracement line.

Descend gradually over Harrisburg bench; in clay-gravelly soil; through scattering greasewood and iron wood undergrowth.

- 3.24 Road from St. George to Salt Lake City bears S. 70° W. and N. 70° E.
- 17.40 Branch road bears N. 65° E. and S. 65° W.
- 19.00 Foot of descent about 25 ft. below the sec. cor. bears N. 65° E. and S. 65° W.; ascend.
- 22.00 Begin ascent of foot of mountain bears S. 70° W. and N. 70° E.; leave clay-gravelly soil and enter sandy stony ground.
- 26.89 Top of sandstone mountain S. side of Harrisburg bench about 40 ft. above the foot of mountain, bears S. 70° W. and N. 70° E.; descend abruptly on S. E. slope of mountain.
- 40.30 Foot of mountain about 250 ft. below top of mountain bears N. 70° E. and S. 70° W.
Fall 40 lks. E. of the old 1/4 sec. cor bet. secs. 3 and 4, which is a white sandstone 14x12x4 ins., marked 1/4 on W. face.
The course of this line is therefore S. 00° 34' W.

Retracements of Subdivisions of T.42 S., R.14 W.-Continued

Chains. Land on bench, rolling; S. of bench mountainous.
 Soil, clay and gravel, sandy and stony; 2nd. and 4th.
 rate.
 No timber.
 Mountainous land on 18.30 chs.

June 7, 1899.

Knowing from the re-survey and retracements of N. boundaries of the Tp. and survey of the subdivision lines closing on secs. 4 and 5, that the exterior lines of sec. 4 will not close I retrace the line bet. secs. 4 and 5 as follows:

June 10, 1899: At the S.E. cor. of sec. 5, as described in notes of this date of the subdivisions of T.42 S., R.14 W., Book C, I set off 23° 3' N. on the decl. arc; and at 11h 59m, a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 11' N.

From this cor. I run N. on a blank line bet. secs. 4 and 5.

40.00 Find no trace of the old 1/4 sec. cor. after diligent search.

79.98 Intersect the N. bdy. of the Tp. 90 lks. E. of the old cor. of secs. 4, 5, 32 and 33, heretofore described in notes of retracement and re-survey of the N. bdy of the Tp. Book B.

June 10, 1899: At this cor. at 2h p.m., l.m.t., I set off 37° 11' N. on the lat. arc; 23° 04' N. on the decl. arc; and determine with the solar a true meridian.

Thence I run S. 00° 39' E. on a true line bet. secs. 4 and 5.

Descend gradually, in sandy stony and gravelly soil; through scattering greasewood and iron wood undergrowth.

8.00 Foot of descent about 25 ft. below the sec. cor. bears N.E. and S.W.; ascend N.W. slope of rocky ridge.

39.98 Top of ridge about 150 ft. high, bears N. 200° E. and S.

Retracement of Subdivisions of T.42 S., R.14 W.-Continued.

Chains. S.20° W.

39.99 Set a volcanic stone 12x10x6 ins., 8 ins. in the ground for restored 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

Descend gradually over E. slope of ridge.

55.00 Begin abrupt descent over S.W. slope of ridge.

65.00 Foot of ridge about 125 ft. below the top of ridge bears S.E. and N.W.; descend more gradually over low broken ridges and foot hills, on Harrisburg bench.

73.70 Road bears N.E. and S.W.

74.93 The closing cor. of secs. 4 and 8 heretofore described

75.40 Telegraph line from St. George to Salt Lake City, bears S.W. and N.E.

Descend into hollow.

79.98 The S.E. cor. of sec. 5 heretofore described, in hollow about 25 ft. deep which drains S.W. along the N.W. foot of sandstone mountain.

Land mountainous, broken ridges and rolling and broken bench.

Soil, sandy, gravelly and stony; 3rd. and 4th. rate.

No timber.

Mountainous land on 65.00 chs.

June 10, 1899.

Knowing from retracements and re-survey of the N. and W. bdys. of the Tp. and survey of subdivisions with lines closing on Secs. 5 and 6, that the exteriors of secs. 5 and 6 will not close, I re-survey the S. bdy. of sec. 5 as follows:

June 15, 1899: At the old cor. of secs. 5, 6, 7 and 8, which I re-marked for cor. of secs. 5 and 6 only, as described in notes of subdivisions of this Tp. ? Book

O, I set off 37° 11' N. on the lat. arc; 23° 20' N. on the decl. arc; and at 8^h a.m., l.m. t., determine with the solar a true meridian.

Thence I run N.

E. on retracement line on S. bdy. of sec. 5.

Retracement of subdivisions of T.42 S., R.14 W.-Continued

Chains.	Over broken sandstone ridges; in sandy, gravelly, clay and stony soil; through scattering greasewood and iron wood undergrowth. Descend.
4.60	Wash about 20 ft. wide and 6 ft. deep drains S. 25° E. Ascend.
5.65	Road bears N. 20° E. and S. 20° W.
9.00	Fall 4 lks. N. of the closing cor. of secs. 7 and 8.
20.10	Fall 9 lks. N. of a stone monument established by County Surveyor as N.E. cor. of Alowis Bauer's Desert Land claim of 80 acres. Top of ascend bears N&S. descend.
22.40	About 140 lks. N. of line is open cut and monument of old mineral claim with indications of copper and silver minerals.
25.00	Hollow about 100 ft. wide and 25 ft. deep drains S.W. Ascend from hollow.
37.00	About 60 lks. S. is open cut and monument of old mineral claim with slight traces of copper and silver minerals.
38.80	Open cut and monument of old mineral claim bears S. about 20 lks.
40.16	Fall 16 lks. N. of the old 1/4 sec. cor., which is a volcanic stone 15x10x 6 ins., marked 1/4 on N. face. I restore the mound on N. 2 ft. high, 1 1/2 ft. base. Pits impracticable. This cor. is about 75 ft. above the sec. cor.
41.25	Top of ascent on sandridge about 50 ft. above the 1/4 sec. cor., bears N. and S.; descend.
58.00	Hollow about 100 ft. wide and 25 ft. deep drains S. 35° W.; ascend from hollow.
70.00	About 30 lks. N. is foot of blue fire clay knoll, about 75 ft. high.
70.40	Road from St. George to Salt Lake City bears N. 50° E. and S. 50° W.
75.00	Top of ridge on Harrisburg bench about 100 ft. above the last 1/4 sec. cor., bears S. 40° W. and N. 40° E.; thence over broken bench land.
75.60	Road from St. George to Salt Lake City bears N. 35° E. and S. 35° W.
75.85	Telegraph line from St. George to Salt Lake City, bears N. 35° E. and S. 35° W.; descend into hollow.
80.29	Fall 49 lks. N. of the S.E. cor. of sec. 5, heretofore

Retracement of Subdivisions of T.42 S.-R.14 W.-Continued.

Chains. described in the notes of subdivisions of this Tp.
 Book *C*
 The course of this line is therefore S.89° 39' E.
 Land mountainous and broken ridges .
 Soil, sandy, gravelly, clay and stony; 3rd. and 4th. rate.
 No timber.
 Mountainous land on 75.00 chs.

I continue re-tracements of the boundaries of
 secs. 5 and 6 as follows:

June 15, 1899: At the old cor. of secs. 5, 6, 7 and 8, as
 re-established and marked by me for cor. of secs. 5
 and 6 only, heretofore described, I set off 37° 11'
 N. on the lat. arc; 23° 20' N. on the decl. arc; and de-
 termine a true meridian with the solar. at 8^h 00^m a.m. / m.t.

Thence I run

N. 0° 20' W. on a blank line bet. secs. 5 and 6.

40.00 I find no trace of the old 1/4 sec. cor. after dili-
 gent search.

79.55 Intersect the N. bdy. of the Tp. 2.08 chs. E. of the
 cor. of secs. 5, 6, 31 and 32, heretofore described, as
 re-established by me in retracement of N. bdy. of
 this Tp. See notes of Book *B* ,

June 15, 1899: At this cor. I set off 23° 20' N. on the
 decl. arc; and, at 12^h M., l.m.t., observe the sun on the
 meridian; the resulting lat. is 37° 12' N.

I begin at the re-established cor. of secs. 5, 6, 31 and
 32, heretofore described, and run

S. 10° 50' E. on a true line bet. secs. 5 and 6.

Descend over broken sandstone ridges; through scat-
 tering greasewood and iron wood undergrowth.

8.80 Wash 65 ft. wide and 15 ft. deep, drains S. 50° W.

10.45 Road from Washington to Leeds in hollow bears N.
 40° E. and S. 10° 50' E. along the line.

18.00 Leave road bears S. 45° W.; hollow drains S. 40° E.;
 descend over S.E. slope of sandridge.

39.75 I find no trace of the old 1/4 sec. cor. after diligent
 search. Set a red sandstone 14x14x4 ins., 10 ins. in

Retracements of subdivisions of T.42 S., R.14 W.-Continued

- Chains. the ground, for re-established $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone, 2 ft. base, $1 1/2$ ft. high, W. of cor. Pits impracticable. This cor. is on S.E. slope of sandridges about 150 ft. below the sec. cor.
- 44.50 About 85 lks. W. is a small spring surrounded with a small grove of ash timber.
- 65.50 Ravine about 150 ft. wide and 50 ft. deep, drains S. 25° E. about 60.00 chs., thence S.W.
- 73.40 Hollow about 75 ft. wide and 50 ft. deep, drains S. 30° E.; descent more gradual over broken foot hills.
- 79.58 The cor. of secs. 5 and 6 on N. bdy. of sec. 7. Land mountainous and broken ridges, very rough. Soil, clay, sandy and stony; 3rd. and 4th. rate. No timber except small groves of ash. Mountainous land on 79.58 chs. Good grazing on the ridges and foot hills.

I continue retracements of old subdivision lines as follows:

June 15, 1899: At the cor. of secs. 5 and 6 on the N. bdy. of sec. 7 heretofore described, I set off $37^{\circ} 11'$

N. on the lat. arc; $23^{\circ} 24'$ N. on the decl. arc; and, at 2 h p.m., l.m.t., determine a true meridian with the solar.

Thence I run

W. on retracement line bet. secs. 6 and 7.

Ascend over broken ridges and foot hills; in sandy stony and clay soil; through scattering greasewood and iron wood undergrowth.

- 17.70 Wash at E. foot of Washington Black ridge about 10 ft. wide and 4 ft. deep, drains S.E.; ascend abrupt on E. slope of ridge.

- 26.00 Top of Washington black ridge about 140 ft. high, bears S.E. about 3.00 chs., thence S., and N.W. about 5.00 chs., thence N. 60° W. about 15.00 chs. to N. point of ridge; ascend gradually over top of ridge.

- 37.80 Top of ascent about 50 ft. above the E. point of

Retracement of Subdivisions of T.42 S., R.14 W.-Continued.

Chains.	ridge, bears N. and S.; descend gradually.
39.91	Fall 14 lks. N. of the old $1/4$ sec. cor., which is an iron stone $12 \times 10 \times 8$ ins., marked $1/4$ on N. face; I restore mound of stone on N., 2 ft. base, $1\ 1/2$ ft. high
40.79	Begin abrupt descent over W. slope of black ridge, bears S. 10° E.; and N. 3.50 chs.; thence N. 70° W. about 20.00 chs.
52.80	W. foot of main ridge about 150 ft. below the top, bears N. and S. E. foot of spur of mountain bears S. E. and joins main ridge about 5.00 chs. dist, N. E. Ascend spur of ridge.
57.00	Top of spur about 75 ft. high, bears N. 30° E. about 17.00 chs. and joins main ridge; and S. 10° E. about 6.00 chs. to S. point of spur. Descend.
60.00	W. foot of spur and ridge about 75 ft. below top of spur bears N. 20° E. and S. 20° W.; descend gradually over foot hills.
64.40	Begin descent into wide hollow, bears N. and S. W.
64.94	Bottom of hollow on E. side, about 20 ft. deep, bears S. W. and N.; branch of creek leaves main creek about 60 lks. N., and runs along the bottom of hollow.
65.00	Creek in bottom of hollow about ^{2 lks.} 1 ft. wide and 3 ins. deep, runs S. 2.00 chs.; thence S. 20° W.; heads N. 20° E. about 15.00 chs. dist. near an old rock house, standing in a grove of cottonwood and ash timber; scattering cotton wood, black willows and ash along the creek, which heads at Grape Vine Spring.
65.29	Begin abrupt ascent on W. side of hollow bears S. W. and N.
67.00	Top of W. side of hollow, bears N. 20° E. and S. 20° W.; ascend over broken sandstone and limestone ridges;
77.79	Fall 27 lks. N. of the old cor. of secs. I, 6, 7 and <u>W.</u> on W. bdy. of Tp., heretofore described. - See retracement of W. bdy. Book <i>B</i> . The course of this line is therefore S. 89° $48'$ W. Land mountainous and broken ridges and foot hills. Soil, sandy stony and clay; 4th. rate. Cotton wood, black willow and ash timber, scattering, along the creek. Mountainous land on 77.79 chs.

Retracements of subdivisions of T.42 S., R.14 W.-Continued

Chains. On the last 8.00 chs. the surface is sprinkled with crumbling limestone with indications of covered ledges of limestone.

June 15, 1899.

GENERAL DESCRIPTION.

For General Description see Subdivision notes of this Township.

Mayhew H. Galley
U. S. Deputy Surveyor.

Volume

#

R0282

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Mayhew H. Dalley

....., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of Retracements of Subdivisions of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah,

showing the respective capacities in which they acted:

Albert C. Dalley, , *Chainman.*

Heber Dalley, , *Chainman.*

Daniel S. Macfarlane, , *Moundman.*

David Dix, , *Moundman.*

Daniel S. Macfarlane, , *Arman.*

Henry Houchen, , *Arman.*

David Dix, , *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Mayhew H. Dalley,

....., United States Deputy Surveyor, in surveying all those parts or portions of the Retracements of Subdivisions of Township No. 42 South, Range No. 14 West, of the Salt Lake Base and Meridian, in the State of Utah,

..... of the meridian, of , which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for the State of Utah.

Albert C. Dalley , *Chainman.*

Heber Dalley , *Chainman.*

Daniel S. Macfarlane , *Moundman.*

David Dix , *Moundman.*

Daniel S. Macfarlane , *Arman.*

Henry Houchen , *Arman.*

David Dix , *Flagman.*

described and sworn to before me this 21st. day of July, 1899.



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public, Iron County, Utah.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dalley, United States Deputy Surveyor,
solemnly swear that, in pursuance of a contract received from Jacob B. Blair
United States Surveyor General for the State of Utah, bearing date of
23rd day of January, 1899, I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Surveyor
General for the State of Utah, the Manual of Surveying Instructions, and the laws of
United States, surveyed all those parts or portions of
the Retracements of Subdivisions of Township No. 42 South, Range No.
14 West,

_____ of the Salt Lake
Base and _____ meridian, in the State of Utah, which are represented in
foregoing field notes as having been ^{retraced} surveyed by me, and under my direction; and I do further solemnly
swear that all the corners of said survey have been established and perpetuated in strict accordance
with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor
General for the State of Utah and in the ^{retraced} specific manner described in the field notes, and
the foregoing are the original field notes of such survey; and should any fraud be detected, I will
incur the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Mayhew H. Dalley
United States Deputy Surveyor

Subscribed by said Mayhew H. Dalley, and sworn to before me }
this 3rd day of May 1901, 1899 } 1900



Edward Henderson
U. S. Surveyor General

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 17, 1901
The foregoing field notes of the ^{retracement} ~~survey~~ of the subdivisions of Township
42 South Range 14 West of the Salt Lake Base and
Meridian, Utah

executed by Mayhew H. Dalley
under his contract No. 224, dated January 23rd, 1899, having
critically examined, and the necessary corrections and explanations made, the said field notes, and
^{retracement} surveys they describe, are hereby approved.

Edward Henderson
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in
_____ has been correctly copied from the original notes on file in this office

United States Surveyor General

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BOOK A-282

FIELD NOTES

OF THE SURVEY OF THE

SOUTH AND WEST BOUNDARIES

OF

TOWNSHIP NO. 38 SOUTH, RANGE NO. 16 WEST,

Of the SALT LAKE BASE AND Meridian,
in the
STATE OF UTAH

AS SURVEYED BY

Mayhew H. Dalley, United States Deputy Surveyor,

for his Contract No. 224, dated January 23rd, 1899

Survey commenced August 18, 1899

Survey completed August 23, 1899

S. R. Dalley 6-10-80
H. G. 570 500
11.71.20

NAMES AND DUTIES OF ASSISTANTS.

Max W. Woodbury,	Chainman.
Edward J. Higbee,	Chainman.
Heber Dalley,	Moundman.
David Dix	Moundman.
Heber Dalley,	Axman.
David Dix,	Axman.
William Macfarlane,	Flagman.

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Max W. Woodbury and Edward J. Higbee
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will lay
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the line,
we will report the true distances to all notable objects, and the true lengths of all lines that we
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the
the S. and W. bdys. of T. 38 S., R. 16 W., of the Salt Lake Base and Meridian,
Utah.

Max W. Woodbury, Ch.
Edward J. Higbee, Ch.

Subscribed and sworn to before me this 15th,
day of August, 1899



My Commission Expires
March 20th, 1903

Senora C. Dally
Notary Public.

WE, Heber Dalley and David Dix
do solemnly swear that we will well and truly perform the duties of moundmen in the establish-
ment of corners, according to the instructions given us, to the best of our skill and ability, in the
the S. and W. bdys. of T. 38 S., R. 16 W., of the Salt Lake Base and Meridian,
Utah.

Heber Dalley, Mon.
David Dix, Mon.

Subscribed and sworn to before me this 15th,
day of August, 1899



My Commission Expires
March 20th, 1903

Senora C. Dally
Notary Public.

WE, Heber Dalley and David Dix
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of
corners and other duties, according to instructions given us, to the best of our skill and ability, in the
the S. and W. bdys. of T. 38 S., R. 16 W., of the Salt Lake Base and Meridian,
Utah.

Heber Dalley
David Dix

Subscribed and sworn to before me this 15th,
day of August, 1899



My Commission Expires
March 20th, 1903

Senora C. Dally
Notary Public.

I, William Macfarlane, do solemnly swear that I will well and
truly perform the duties of flagman according to instructions given me, to the best of my skill and ability,
in the survey of the S. and W. bdys. of T. 38 S., R. 16 W., of the Salt Lake Base and Meridian,
Utah.

William Macfarlane

Subscribed and sworn to before me this 15th,
day of August, 1899



My Commission Expires
March 20th, 1903

Senora C. Dally
Notary Public.

South Boundary of T.38 S., R.16 W.

Chains.

Survey commenced August 18, 1899, and executed with a W. and L. F. Gurley Light Mountain Solar Transit, for description of which see notes of survey of S. bdy. of T.42 S., R.14 W., Book A.

Owing to the intense heat in June 1899, when I completed the survey of T.42 S., R.14 W., I deemed it advisable to discontinue work in Dixie.

My work was discontinued until August 18, 1899. Fearing that further suspension of field work in order to take up the Survey of the Townships in the order named in the contract, would throw my work in the higher altitudes in the winter season, and probably deep snows would cause such delays as would prevent me completing my contract at the time named therein; I deemed it advisable at this date to take up the work in the higher altitudes, as the Townships are disconnected and cannot, therefore, conflict in any of the lines.

I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours, with a true meridian determined by observations on Polaris, I proceed as follows:

It being inconvenient to take observation at the Tp. cor., I set up the instrument at 10.00 chs. S. of the cor. of Tps. 38 and 39 S., Rs. 15 and 16 W., in approximate latitude $37^{\circ}28'$ N.; longitude $113^{\circ}32'$ W.; I set off $37^{\circ}28'$ N. on the lat. arc; $12^{\circ}57'$ N. on the decl. arc; and, at 4^h 4^m p.m., l.m.t., determine with the solar a true meridian and mark a point thereof, on a stone firmly set in the ground 5.00 chs. N. of my instrument.

At 9^h 38^m p.m., l.m.t., I observe Polaris at Eastern elongation, in accordance with the Manual of Instructions, and mark a point in the line, thus determined, on a stone firmly set in the ground, 5.00 chs. N. of my station.

August 18, 1899.

South Boundary of T.38 S., R.16 W.-Continued.

Chains.

August 19, 1899: At 7^h a.m. l.m.t., I lay off the azimuth of Polaris $103^{\circ}3'$, to the West, and mark the True Meridian thus determined, by cutting a small groove in the stone set August 18, on which the true meridian falls about 0.4 ins. W. of the mark determined by the solar.

At 8^h 4^m a.m., l.m.t., I set off $370^{\circ}28'$ N. on the lat. arc; $120^{\circ}45'$ N. on the decl. arc; and mark a point in the true meridian determined with the solar, by a cross on the stone already set 5.00 chs. N. of my station; this mark falls 0.5 ins. W. of the true meridian established by the Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for true meridians, respectively about $0^{\circ}21''$ East and $0^{\circ}26''$ West of the Meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 8^h 30' a.m., is N. $160^{\circ}17'$ W.; the angle thus determined, reduced by the table page 100, gives the Mean Mag. Decl. $160^{\circ}12'$ E.

I project my line N. to the Tp. cor. above referred to, which is a trachyte stone 12x12x6 ins. above ground, marked and witnessed as described by the Surveyor General, from which cor., I run W. on S. bdy. of Tp. bet. secs. 1 and 36.

Ascend abruptly over trachyte ledges on S.E. slope of ridge, through medium dense sage and service berry undergrowth and scattering nut pine and cedars.

6.00 Top of spur about 50 ft. above the Tp. cor., bears S. 30° W. and N. 30° E.; descend over broken trachyte and volcanic ridges on S.W., and W. slope.

40.00 Set a gray granite stone 18x12x5 ins., 12 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, N. of cor. Pits impracticable.

The cor. is on steep N.W. slope of ridge about 150 ft. below top of spur.

South Boundary of T.38 S., R.16 W.-Continued.

- Chains. Leave scattering pines and cedars and enter scattering juniper brush, bears N. 300 E. and S. 300 W.; continue in more dense sage and serviceberry.
- 73.50 Wash about 10 ft. wide and 6 ft. deep drains S.; ascend gradually.
- 75.00 Road from St. George to Vance's ranch bears S. and N.
- 76.00 Re-enter pine and cedar timber bears N. and S.
- 80.00 Set a granite stone 18x16x8 ins., 12 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, marked with 1 notch on the E. and 5 notches on the W. edges; from which
A cedar 12 ins. diam., bears S. 59° 30' W. 70 lks. dist., marked
T. 39 S., R. 16 W., S. 2, B. T.
A cedar 16 ins. diam., bears N. 70° 30' W., 93 lks. dist., marked
T. 38 S., R. 16 W., S. 35, B. T.
A double cedar 10 ins. diam., bears S. 270 E., 72 lks dist., marked
T. 39 S., R. 16 W., S. 1, B. T.
Land mountainous and broken ridges.
Soil, sandy, clay and stony; 4th. rate.
Timber, nut pine, cedar and juniper tree.
Undergrowth, sage service berry and greasewood, which with grasses and shrubbery afford fair grazing.
Mountainous land on 80.00 chs.

West bet. secs. 2 and 35.

Ascend over E. slope of high ridge; through medium dense pine and cedar timber; over stony ground.

- 40.00 Top of ridge about 200 ft. high, bears N. and S.
Set a gray granite stone 18x12x4 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
Descend rapidly over W. slope of ridge.
- 75.00 West foot of ridge about 225 ft. below top of same, bears N. and S.; gradually descend over foot hills

South Boundary of T.38 S., R.16 W.-Continued.

Chains	sloping to W. and S.W.
78.34	Telegraph line running from St. George to Panacca bears S.10° W. and N.10° E.
- 80.00	Set a gray granite stone 24x14x4 ins., 18 ins. in the ground, for cor. of secs. 2, 3, 34 and 35, marked with 2 notches on E. and 4 notches on W. edges; from which A cedar 8 ins. diam., bears N. 69° 30' W., 77 lks. dist., marked. T. 38 S., R. 16 W., S. 34, B. T. A cedar 8 ins. diam., bears N. 62° 45' E., 51 lks. dist., marked T. 38 S., R. 16 W., S. 35, B. T. A double cedar 8 ins. diam., bears S. 15° E., 152 lks. dist., marked T. 39 S., R. 16 W., S. 2, B. T. A cedar 8 ins. diam., bears S. 0° 5' W., 180 lks. dist., marked T. 39 S., R. 16 W., S. 3, B. T. Land mountainous and broken covered with medium dense nut pine and cedar timber, and sage, greasewood and service berry undergrowth. Undergrowth, shrubbery and grasses afford fair grazing. Mountainous land on 80.00 chs. August 19, 1900: At this cor. I set off 120° 40' 30" E. on the decl. arc; and, at 0 ^h 3 ^m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 28' N.
	West, bet. secs. 3 and 34. Gradually descend over stony ground; through scattering cedar and pine timber.
II.30	Road from Pine Valley to Mountain Meadows and Modena bears S., and joins the Main St. George Road at about 30.00 chs. N.
19.85	Road from St. George to Mountain Meadows and Modena, bears S. 10° W. and N. 10° E.
22.10	Wash at foot of descent about 75 ft. below the sec. cor. about 20 ft. wide and 5 ft. deep, drains S. 50° E.; begin

South Boundary of T.38 S., R.16 W.-Continued.

Chains.	ascent of N.E.slope of ridges.
40.00	Set a gray granite stone 18x14x6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor.. Pits impracticable. This cor. is on N.E. slope of ridge about 75 ft. above the wash.
47.53	Trail bears N. 50° W. and S. 50° E.
64.00	Top of ridge about 125 ft. above the 1/4 sec. cor., bears S. 50° E. and N. 50° W.; descend over very steep and rocky S. and S.W. slope of ridge.
80.00	Set a gray sandstone 24x12x6 ins., 18 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, marked with 3 notches on E. and W. edges; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. The cor. is on steep and rocky S.W. slope of ridge, about 75 ft. below top of same.
	Land mountainous and broken,
	Soil, sandy, clay and stony; 4th. rate.
	Timber, scattering nut. pine and cedars.
	Greasewood, sage and service berry undergrowth and shrubbery, which with native grasses afford fair grazing.
	Mountainous land on 80.00 chs.
	August 19, 1899.

August 21, 1899: I set off 37° 28' N. on the lat. arc; 120° 04' N. on the decl. arc; and, at 9h a.m., l.m.t., determine a true meridian with the solar, at the cor. of secs. 3, 4, 33 and 34, on the S. bdy. of the Tp., as heretofore described; thence I run W. bet. secs. 4 and 33.

Descend over broken ridges on steep, S., S.W. and W. slopes; through scattering pine and cedar timber.

40.00	Set a trachyte stone 18x14x6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. This cor. is at foot of descent,
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South Boundary of T.38 S., R.16 W.-Continued.

Chains.	in a hollow which drains S.200° W., about 1.00 ch., thence S.50° W.; and about 125 ft. below the sec. cor.
	Ascend E. and S.E. slope of broken ridges.
50.00	Top of ridge about 75 ft. high, bears N. and S.; descend.
52.60	Bottom of hollow about 75 ft. deep, drains S.; ascend.
56.00	Top of ridge on W. side of hollow about 80 ft. above bottom of hollow, bears N. and S.; descend over S. and S.W. slopes of broken and rocky ridges.
62.00	Enter dense cedar and pine timber and oak undergrowth; bears N. and S.
80.00	Set a white sandstone 16x10x8 ins., 11 ins. in the ground, for cor. of secs. 4, 5, 32 and 33, marked with 4 notches on E. and 2 notches on W. edges; from which A double cedar 10 ins., diam., bears S.84° W., 22 lks. dist., marked T.39 S., R.16 W., S.5, B.T. A cedar 12 ins. diam., bears N.42° W., 50 lks. dist., marked T.38 S., R.16 W., S.32, B.T. A cedar 14 ins. diam., bears N.63° E., 75 lks. dist., marked T.38 S., R.16 W., S.33, B.T. A cedar 14 ins. diam., bears S.78° E., 45 lks. dist., marked T.39 S., R.16 W., S.4, B.T. Land mountainous and broken, with scattering pine and cedars on E. 62.00 chs. and dense pines and cedar on W. 18.00 chs. Scattering greasewood, sage and service berry undergrowth on E. part of line and dense oak and scattering juniper trees or brush on W. part. Fair grazing. Mountainous land on 80.00 chs.
3.00	West, bet. secs. 5 and 32, gradually descending on S.W. slope of ridge; through dense cedar and pine timber. Wash, 10 ft. wide and 10 ft. deep, drains W.;

South Boundary of T.38 S., R.16 W.-Continued.

Chains.

- 4.00 Leave wash at about 25 ft. below the sec. cor., drains S. 80° W.; begin ascent of S.E., S. and S.W. slope of high broken ridges with course of drainage Southerly into ravine.
- 40.00 Set a gray hard sandstone 14x10x10 ins., 10 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, N. of cor. Pits impracticable.
- The cor. is on steep and rocky Southerly slope of high mountain, about 150 ft. above the sec. cor.
- 51.57 Top of ridge about 150 ft. above the $1/4$ sec. cor., bears N. 40° E. and S. 70° W.
- Aug. 21, 1899: At this point on line, I set off 120' N. on the decl. arc; and at 0h 3m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ} 28' N.$
- Descend over N.W. slope of spur of ridge.
- 70.00 Bottom of hollow at foot of ridges about 200 ft. below top of ridge, drains S. 70° W.; ascend on S. slope of ridge or spur.
- 75.00 Top of spur about 100 ft. above the hollow, bears N. and S.; descend over steep S.W. slope of ridge.
- 80.00 Set a white sandstone 14x10x8 ins., 10 ins. in the ground, for cor. of secs. 5, 6, 31 and 32, marked with 5 notches on E. and 1 notch on W. edges; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, W. of cor. Pits impracticable. The cor. is on steep S.W. slope of ridge about 25 ft. below top of spur.
- Land mountainous and very much broken, covered with thick nut pine and cedars; also dense undergrowth of sage, service berry and oak.
- Soil, clay, sandy and stony; 4th. rate.
- Good grazing.
- Mountainous land on 80.00 chs.

West, bet. secs. 6 and 31.

Descend gradually over S.W. slope of ridge,

South Boundary of T.38 S., R.16 W.-Continued.

Chains.

- 5.00 Begin abrupt descent on W. slope of ridge or spur, bears N. and S. . . .
- 8.30 Creek in bottom of ravine about 200 ft. below the sec. cor., runs S. 20° W., and heads near Mountain Meadow Monument. Water is about 3 lks. wide and 4 ins. deep, is clear, fresh and cool. This creek is known near its source as Mountain Meadow Creek, but at this point takes the name of the Mc. Godsey Creek.
- 8.50 Spring branch about 1.00 ch. wide E. and W., and 4.00 chs. long N. and S.; ascend rapidly over N.E. and N. slopes of ridges. . . .
- 10.00 Trail bears S.E. and N.W. . . .
- 27.00 Top of spur of ridge about 200 ft. above the creek, bears N. 70° E. and S. 70° W. ; descend. . . .
- 32.00 Foot of spur about 40 ft. below the top, bears N. 70° E. and S. 70° W.; ascend gradually. . . .
- 40.00 Set a gray granite stone 18x12x6 ins., 12 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, N. of cor. . . . Pits impracticable. . . .
The cor. is on N.E. slope of spur about 20 ft. above the foot of same. . . .
- 46.50 Top of spur of ridge about 80 ft. above the $1/4$ sec. cor., bears S. 20° E. and N. 20° W.; trail bears S. 40° E. and N. 40° W.; descend over S.W. slope of high ridges. . . .
- 76.70 Wash at foot of descent about 10 ft. wide and 4 ft. deep, drains S. 10° E.; ascend gradually from wash, over S.E. slope of ridge. . . .
- 80.00 Set temp. cor. of Tps. 38 and 39 S., Rs. 16 and 17 W. on Southeasterly slope of ridge about 150 ft. below top of last spur. . . .

August 21, 1899.

- I afterwards permanently establish the Tp. cor. 80 lks. W. of temp. cor., this being the point of intersection with the W. bdy. of the Tp. as run due S. from N.W. cor. at
- 80.80 Set volcanic stone 15x10x10 ins., 10 ins. in the ground, for cor. of Tps. 38 and 39 S., Rs. 16 and 17 W., marked 38 S., on N.E., 16 W. on S.E., 39 S. on S.W., and 17 W. on

South Boundary of T.38 S., R.16 W.-Continued.

Chains. N.W. faces, with 6 notches on each edge; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of cor. Pits impracticable.

From which cor.,

A cedar 16 ins. diam., bears N. 80° 30' E., 138 lks. dist., marked

T. 38 S., R. 16 W., S. 31, B. T.

Land mountainous and broken ridges.

Soil, sandy, clay and stony; 4th. rate.

Timber, medium dense nut pine and cedars on first 1/2 mile; scattering pine and cedars on last 1/2 mile; and scattering cottonwoods along the Mc. Godsey creek.

Medium dense undergrowth of sage, service berry and oak, with an abundance of shrubbery and grasses, which afford good grazing.

Mountainous land on 80.80 chs.

August 23, 1899..

GENERAL DESCRIPTION:

For General Description see Notes of the Subdivisions of this Tp., Book #

August 23, 1899.

Mayhew H. Galley
U.S. Deputy Surveyor.

West Boundary of T.38 S., R.16 W.

August 22, 1899: I set off $37^{\circ}28'$ N. on the lat. arc; $11^{\circ}45'$ N. on the decl. arc; and at $8^{h}3^{m}$ a.m., l.m.t., determine a true meridian with the solar, at the temp. cor. of Tps. 38 and 39 S., Rs. 16 and 17 W., set by me August 21, 1899, in survey of S. bdy. of this Tp.

Thence I run

North, on a random line, along the W. bdy. of the Tp., setting temp. $1/4$ sec. and sec. corners at intervals of 40.00 chains; and, at 470.40 chs., intersect the N. bdy. of the Tp., 80 lks. E. of the old cor. of Tps. 37 and 38 S., Rs. 16 and 17 W., which is a sandstone $18 \times 12 \times 8$ ins., projecting 6 ins. above ground, marked and witnessed as described by the Surveyor General.

I begin at the cor. of Tps. 37 and 38 S., Rs. 16 and 17 W., above described and survey the W. bdy. of the Tp. as follows:

South, on a true line bet. secs. 1 and 6.

Ascend over broken mountain ridges; through dense sage, service berry and oak undergrowth.

20.25 Ravine 100 ft. wide and 50 ft. deep, drains $S. 50^{\circ} W.$

25.45 Top of ascent on spur of ridge about 75 ft. above the Tp. cor., bears N.E. and S.W.; descend.

30.40 Set a gray granite stone $15 \times 10 \times 6$ ins., 10 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone 2 ft. base, $1 1/2$ ft. high, W. of cor. Pits impracticable.

The cor. is on S.W. slope of spur of ridge about 50 ft. below the top.

34.65 Wash at foot of descent about 50 ft. below the $1/4$ sec. cor., about 8 ft. wide and 3 ft. deep, drains $N 40^{\circ} W.$; ascend from ravine or wash.

38.40 Trail bears $N. 10^{\circ} W.$ and $S. 10^{\circ} E.$

46.40 Top of ascent on spur of ridge about 100 ft. above the wash, bears $N. 50^{\circ} W.$ and $S. 50^{\circ} E.$; descend rapidly over steep rocky S.W. slope of spur.

55.15 Bottom of ravine about 150 ft. deep, with small stream of pure fresh water about 6 lks. wide and 4 ins. deep drains $N. 50^{\circ} W.$; heads $S. 50^{\circ} E.$ about 30.00 chs. dist. Ascend rapidly from ravine.

67.90 Top of ascent about 150 ft. above the ravine, on spur

West Boundary of T.38 S., R.16 W.-Continued.

Chains. of ridge, which bears E. and W.; descend.

70.40 Set a gray granite stone 18x8x4 ins., 12 ins. in the ground, for cor. of secs. 1, 6, 7 and 12, marked with 1 notch on N. and 5 notches on S. edges; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. The cor. is on S.E. slope of spur about 50 ft. below the top.

Land mountainous and broken ridges..

Soil, clay, sandy and stony; 4th. rate..

No timber, except a few scattering cedars on first 10.00 chs.

Sage, service berry and oak undergrowth, with and abundance of shrubbery and native grasses afford fair grazing.

Mountainous land and dense undergrowth on 70.40 chs.

August 22, 1899.

August 23, 1899: I set off 37° 32' ✓ N. on the lat. arc; 11° 25' 50" ✓ N. on the decl. arc; and, at 9^h a.m., 1 p.m., determine a true meridian with the solar, at the cor. of secs. 1, 6, 7 and 12, heretofore described,

Thence I run

South, bet. secs. 7 and 12.

Descend over S.E. slope of spur of ridge; through dense oak and service berry undergrowth.

7.35 Hollow and foot of spur about 75 ft. below the sec. cor., descends N. 50° E., and ascends S. 50° W.; ascend rapidly over N.E. and E. slope of high knoll.

29.00 Top of ascent on E. slope of knoll, about 250 ft. above the foot and about 40 ft. below top of knoll which bears W. about 1.00 ch.; this knoll joins high mountain range on the S.E.; descend rapidly over S.E. and S. slope of knoll.

40.00 Set a gray granite stone 15x12x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. This cor. is on S.W. slope of ridge which joins the knoll, about 150 ft.

West Boundary of T.38 S., R.16 W.-Continued.

Chains.	below the top of knoll..
49.50	Wash at foot of knoll and ridges about 250 ft. below top, 15 ft. wide and 5 ft. deep, drains S. 40° W.; ascend over broken spurs of ridges.
59.90	Hollow at N. foot of knoll about 100 ft. wide and 50 ft. deep, drains W.; ascend from bottom of hollow.
63.00	Top of knoll about 75 ft. high; descend.
70.70	Wash at S. foot of knoll about 60 ft. below the top, about 6 ft. wide and 3 ft. deep, drains N. 50° W.; ascend.
70.75	Trail bears S. 60° E. and N. 60° W., running to a spring about 50.00 chs. dist.
80.00	Set a white soap stone 20x16x4 ins., 15 ins. in the ground, for cor. of secs. 7, 12, 13 and 18, marked with 2 notches on the N. and 4 notches on the S. edges; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
	This cor. is on N.W. slope of high ridge, about 75 ft. above the last wash, in heavy oak brush.
	Land mountainous, and broken ridges.
	Soil, sandy and clay covered with gravel and partly covered with stone; 3rd. and 4th. rate.
	Undergrowth of oak brush and service berry with shrubbery and grasses in abundance, afford fair grazing.
	No timber.
	Mountainous land and land covered with dense undergrowth on 80.00 chs.

South, bet. secs. 13 and 18.

	Ascend over N.W. slope of ridge; through dense oak and service berry undergrowth.
21.25	Hollow about 150 ft. wide and 50 ft. deep, drains S. 50° W.; enter scattering cedars bears N.W. and S.E.
27.00	Leave cedars bears E. and W.
28.25	Leave oak brush bears S.E. and N.W.
30.47	Trail bears N. 50° W. and S. 50° E.
35.70	Enter dense oak undergrowth bears N.W. and S.E.
40.00	Set a white soap stone 24x12x6 ins., 18 ins. in the

West Boundary of T.38 S., R.16 W.—Continued.

Chains.	ground, for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone 2 ft. base, $1\ 1/2$ ft. high, W. of cor. Pits impracticable. The cor. is in thick oak brush on N.E. slope of ridge, about 150 ft. above the sec. cor.
55.50	Top of ridge about 50 ft. above the $1/4$ sec. cor., bears $S. 80^{\circ} E.$ and $N. 80^{\circ} W.$; descend over steep S.E. slope of ridge.
65.00	Ravine at foot of ridge about 150 ft. below top, 15 ft. wide and 8 ft. deep, drains $S. 50^{\circ} E.$; ascend over N.E. slope of ridge.
69.67	Trail bears $N. 50^{\circ} W.$ and $S. 50^{\circ} E.$
72.80	Trail bears $N. 50^{\circ} W.$ and $S. 50^{\circ} E.$
75.50	Top of spur about 75 ft. high, bears E. and W.; descend.
79.50	Foot of descent and hollow about 75 ft. below top of spur, drains E.; hollow heads W. at top of mountain about 10.00 chs. dist.; ascend on N.E. slope of ridge.
80.00	Set a gray granite stone $15 \times 10 \times 6$ ins., 10 ins. in the ground, for cor. of secs. 13, 18, 19 and 24, marked with 3 notches on N. and S. edges; and raised a mound of stone 2 ft. base, $1\ 1/2$ ft. high, W. of cor. Pits impracticable. Land mountainous and broken ridges. Soil sandy and clay and partly stony; 3rd. and 4th. rate. No timber, except scattering cedars in N. $1/2$ of secs. Undergrowth, oak and service berry with shrubbery and grasses in abundance to afford fair grazing. Mountainous land or land covered with dense undergrowth on 80.00 chs.
	South, bet. secs. 19 and 24. Ascend over N.E. slope of high ridge; through dense oak and service berry undergrowth.
7.00	Top of high mountain about 100 ft. above the sec. cor., bears $N. 50^{\circ} W.$ and $S. 50^{\circ} E.$; descend over S. slope of mountain.
15.50	Foot of descent about 100 ft. below top of ridge; bears

West Boundary of T.38 S.-R.16 W.-Continued.

Chains.	E. and W.; a spring branch bears E. about 15.00 chs., drains Southwesterly.
22.50	Top of spur of ridge about 75 ft. high, bears N. 20° E. and S. 20° W.; descend rapidly over S. slope of high spur and ridge.
33.30	Trail bears N. 50° E. and S. 50° W.
39.50	Trail bears N. E. and S. W.
40.00	Set a gray granite stone 18x12x8 ins., 12 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone 2 ft. base, 1 $1/2$ ft. high, W. of cor. Pits impracticable.
	This cor. is near foot of S. slope of ridge about 150 ft. below top of spur of ridge.
42.45	Wash at foot of descent about 30 ft. below the $1/4$ sec. cor., about 15 ft. wide and 6 ft. deep, with water in holes, drains S. 50° W.; known as Hard Scrabble Creek. Ascend from wash over broken ridges and ledges on N. W. slope of high mountain. Enter scattering cedars.
58.50	Ravine about 5.00 chs. wide and 100 ft. deep, drains S. 80° W. Ascend rapidly from ravine over N., N. E. and E. slopes of high ridge.
74.00	Top of main ^{ridge} and divide about 300 ft. high, bears N. 20° W. and S.; thence descend over top of divide.
77.50	Foot of descent on top of divide bears E. and W.; ascend.
80.00	Set a gray granite stone 18x12x6 ins., 12 ins. in the ground, for cor. of secs. 19, 24, 25 and 30, marked with 4 notches on N. and 2 notches on S. edges; and raised a mound of stone 2 ft. base, 1 $1/2$ ft. high, W. of cor. Pits impracticable.
	Land mountainous and broken, very rough and rocky on S. $1/2$ mile.
	Soil, clay, sandy and gravelly, with ledges and boulders on last 35.00 chs.; 3rd. and 4th. rate.
	No timber, except statting cedars on last 37.50 chs.
	Undergrowth of oak, and service berry with shrubbery and grasses in abundance afford good grazing.
	Mountainous land and land covered with dense undergrowth on 80.00 chs.
	August 23, 1899: At this sec. cor., I set off $11^{\circ}20'30''$ N. on the decl. arc; and, at 0h2 ^m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ}29'$ "N."

West Boundary of T.38 S., R.16 W.-Continued.

Chains.	South, bet. secs. 25 and 30. Ascend over top of divide; through dense sage, oak, and service berry brush.
1.50	Top of ascent on divide about 50 ft. above the sec. cor., bears N. and S.W.; descend over S.E. slope of ridge.
15.00	Foot of descent about 125 ft. below top of divide, bears N. 70° E. and falls rapidly to S. 70° E.; ascend N.E. slope of spur of main ridge.
20.40	Top of spur of ridge about 100 ft. above the N.E. foot, rises and falls rapidly N. 70° W. and S. 70° E. respectively. Descend over S.E. slope of spur.
36.00	Ravine at foot of descent about 175 ft. below top of spur, about 10 ft. wide and 10 ft. deep, falls rapidly to E., and heads W. about 10.00 chs. near top of divide. Ascend on N.E. slope of spur of main ridge.
40.00	Set a gray granite stone 16x10x6 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. This cor. is on N.E. slope of spur of main ridge about 150 ft. above the ravine.
40.70	Top of spur of main ridge about 25 ft. above the 1/4 sec. cor., bears N. 70° E. and S. 70° W.; descend over S.E. and S. slope of spur and ridges.
54.90	Begin abrupt descent through hollow with high ridges on either side; enter medium dense cedar and pine timber bears E. and W.
55.50	Wash about 10 ft. wide and 4 ft. deep drains S. 70° W.; thence along E. side of ravine on steep W. slope of broken ridges in rock canon.
66.80	Small spring in bottom of wash about 50 ft. deep, at S. foot of ledges, bears W. of line about 1.00 ch. dist.
73.87	Wash about 15 ft. wide and about 5 ft. deep in bottom of rock canon, about 250 ft. below top of last spur of main ridge, drains S. 50° E.; thence ascend along steep S.E. slope of ridges on W. side of rock canon.
75.50	Ascend over perpendicular ledges about 15 ft. high, bears S.E. and N.W..

West Boundary of T.38 S., R.16 W.--Continued.

Chains.

80.00

Set a gray granite stone, 18x10x8 ins., 12 ins. in the ground, for cor. of secs. 25, 30, 31 and 36, marked with 5 notches on N. and 1 notch on S. edges; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor.

Pits impracticable. I afterwards mark witness points to the sec. cor. as follows: from which

A nut pine, 8 ins. diam., bears S. 42° E., 19 lks. dist., marked

T. 38 S., R. 16 W., S. 31, B. T.

A nut pine 12 ins. diam., bears S. 73 1/2° W., 37 lks. dist., marked

T. 38 S., R. 17 W., S. 36, B. T.

A nut pine 12 ins. diam., bears N. 31 1/2° W., 102 lks. dist., marked

T. 38 S., R. 17 W., S. 25, B. T.

A cedar 8 ins. diam., bears N. 42 3/4° E. 89 lks. dist., marked

T. 38 S., R. 16 W., S. 30, B. T.

This cor. is on steep side hill on W. side of rock canon, sloping S. 50° E., and about 75 ft. above the wash in bottom of rock canon.

Land mountainous and broken ridges.

Soil, clay sandy and stony; 4th. rate.

Timber, medium dense nut pine and cedars on last 25.10 chains.

Undergrowth, shrubbery and grasses in abundance, which afford good grazing.

Mountainous land and land covered with dense undergrowth on 80.00 chs.

S. bet. secs. 31 and 36; descending along broken ridges on W. side of rock canon, over steep S. E. slope; through medium dense nut pine and cedars; and through dense sage, service berry and oak undergrowth.

4.70

Ravine 20 ft. wide and 10 ft. deep, about 50 ft. below the sec. cor., drains rapidly S. 50° E. into rock canon; ascend from ravine over N. E. slope of high ridge.

17

West Boundary of T.38 S., R.16 W.-Continued.

Chains.

- 27.00 Top of spur or ridge about 150 ft. above the ravine, bears S.30° E. and N.300 W.; descend rapidly over S.W. slope. Leave cedar and pine timber bears E. and W.
- 40.00 Set a gray granite stone 18x10x6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. This cor. is on S.W. slope near foot of same about 200 ft. below top of last spur or ridge.
- 42.50 Foot of descent and hollow about 50 ft. below the 1/4 sec. cor., drains S.500 E.; ascend on N.E. slope of spur.
- 50.00 Top of spur about 75 ft. above the hollow, bears N.W. and S.E.; descend over S.W. slope of spur.
- 53.00 Hollow at foot of descent about 100 ft. below top of spur, drains S.E.; ascend N.E. slope of spur.
- 58.00 Top of spur of main ridge about 100 ft. above the hollow, bears N.400 W. and S.400 E.; thence descend rapidly over S.W. and S. slope of high ridges.
- 65.00 Enter scattering cedar and pine timber bears E. and W.
- 71.00 Begin more gradual descent, bears E. and W.
- 80.00 Intersect the S.bdy. of the Tp. at the cor. of Tps. 38 and 39 S., R. 16 and 17 W., as permanently established by me in Survey of S.bdy. of this Tp. and described in the Notes thereof. Cor. about 250 ft. below top of spur. Land mountainous and broken ridges. Soil, sandy clay and stony; 4th. rate. Timber, nut pine and cedars-scattering on S. part of secs., and medium dense on N. part. Undergrowth, shrubbery and grasses in sufficient quantity to afford fair grazing. Mountainous land and land covered with dense undergrowth on 80.00 chs.

August 23, 1899.

GENERAL DESCRIPTION:

For General Description see Notes of the Subdivisions of this Tp., Book H

August 23, 1899.

Mayhew H. Dalley
U.S. Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Mayhew H. Dalley

....., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the S. and W. bdys. of T. 38 S., R. 16 W., of the Salt Lake Base and Meridian, Utah. showing the respective capacities in which they acted:

Max W. Woodbury, , Chainman.

Edward J. Higbee, , Chainman.

Heber Dalley, , Moundman.

David Dix, , Moundman.

Heber Dalley, , Axman.

David Dix, , Axman.

William Macfarlane, , Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Mayhew H. Dalley

....., United States Deputy Surveyor, in surveying all those parts or portions of the S. and W. bdys. of T. 38 S., R. 16 W.

..... of the Salt Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey as been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah

Max W. Woodbury, Chainman.

Edward J. Higbee, Chainman.

Heber Dalley, Moundman.

David Dix, Moundman.

Heber Dalley, Axman.

David Dix, Axman.

William Macfarlane, Flagman.

described and sworn to before me this 21st. day of December, 1899.



My Commission Expires
March 29th, 1903

Senora C. Dalley
Notary Public.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dalley, United States Deputy Surveyor,
 solemnly swear that, in pursuance of a contract received from Jacob B. Blair
 United States Surveyor General for Utah, bearing date of
23rd day of January, 1899, I have well, faithfully, and truly, in my
 proper person, and in strict conformity with the instructions furnished by the United States Survey
 General for Utah, the Manual of Surveying Instructions, and the laws of
 United States, surveyed all those parts or portions of the S. and W. b'dys. of T. 38 S.,
 R. 16 W.,

of the Salt Lake
Base and meridian, in the State of Utah, which are represented in
 foregoing field notes as having been surveyed by me, and under my direction; and I do further sole
 swear that all the corners of said survey have been established and perpetuated in strict accordance
 the Manual of Surveying Instructions, and the special written instructions of the United States Sur
 veyor General for Utah and in the specific manner described in the field notes, and
 the foregoing are the original field notes of such survey; and should any fraud be detected, I will s
 the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Mayhew H. Dalley
 United States Deputy Surveyor

Subscribed by said Mayhew H. Dalley, and sworn to before me }
 this 31st day of May, 1901, 1899



Edward Henderson
 U. S. Surveyor General for Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 7, 1902

The foregoing field notes of the survey of The South West Boundary
of Township 38 South Range 16 West of the Salt Lake
Base and Meridian, Utah

executed by Mayhew H. Dalley
 under his contract No. 224, dated January 23rd, 1899, havin
 critically examined, and the necessary corrections and explanations made, the said field notes, a
 surveys they describe, are hereby approved.

Edward Henderson
 United States Surveyor

I certify that the foregoing transcript of the field notes of the above-described surveys in
 _____, has been correctly copied from the original notes on file in this c

United States Surveyor

BOOK A-282

FIELD NOTES

RETRACEMENT AND RE-
OF THE SURVEY OF THE

PINE VALLEY GUIDE MERIDIAN

through

TOWNSHIPS NOS. 38 SOUTH,

BETWEEN RANGES NOS. 15 AND 16 WEST,

Of the SALT LAKE BASE and Meridian,
in the
STATE OF UTAH.

AS SURVEYED BY

Mayhew H. Dalley, United States Deputy Surveyor,

Under his Contract No. 224, dated January 23rd, 1899

Survey commenced August 24th, 1899

Survey completed August 26th, 1899

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Retracement, &c.	2.10.00 ✓
Recovering heights	3.73.89 ✓
Closing	2.34 ✓
Contingent	1-01-20 ✓

NAMES AND DUTIES OF ASSISTANTS.

Edward J. Higbee, Chainman.

Max W. Woodbury, Chainman.

David Dix

Chainman

William Macfarlane, Chainman.

Heber Dalley,

Moundman.

Heber Dalley,

Axman.

Hillman Dalley,

Flagman.

G-151

Volume

#

R0282

BOOK A-282

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Edward J. Higbee & Max W. Woodbury and David Dix & William Macfarlan
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that
we will report the true distances to all notable objects, and the true lengths of all lines that we assist in
measuring, to the best of our skill and ability, and in accordance with instructions given us in the survey
the Pine Valley Guide Meridian, through Tps. 36 S., between Rs. 15 and
16 W., of the Salt Lake Base and Meridian, Utah

Edward J. Higbee, Chainman. Max W. Woodbury, Chainman.
David Dix, Chainman.

Subscribed and sworn to before me this 15th. } William Macfarlan, Chainman
day of August, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public.

WE, Heber Dalley and

do solemnly swear that we will well and truly perform the duties of moundmen in the establish-
ment of corners, according to the instructions given us, to the best of our skill and ability, in the survey
the Pine Valley Guide Meridian, through Tps. 38 S., between Rs. 15 and 16 W.,
of the Salt Lake Base and Meridian, Utah.

Heber Dalley, Moundman

Subscribed and sworn to before me this 15th. }
day of August, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public.

WE, Heber Dalley and

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corn-
ers and other duties, according to instructions given us, to the best of our skill and ability, in the survey
the Pine Valley Guide Meridian, through Tps. 38 S., between Rs. 15 and
16 W., of the Salt Lake Base and Meridian, Utah.

Heber Dalley, Arma

Subscribed and sworn to before me this 15th. }
day of August, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public.

I, Hillman Dalley, do solemnly swear that I will well and

perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the
retracement & re-
survey of the Pine Valley Guide Meridian, through Tps. 38 S., bet. Rs. 15 and
16 W., of the Salt Lake Base and Meridian, Utah.

Hillman Dalley, Flagman.

Subscribed and sworn to before me this 15th. }
day of August, 1899



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public.

Retracement of E.bdy. of T.38 S., R.16 W. (Pine Valley Guide Meridian.)

Chains

Retracement commenced August 24, 1899, and executed with a W. and L. E. Gurley Light Mountain Solar Transit for description of which see notes of Survey of S. bdy. of T.42 S., R.14 W., Book A.

For complete solar test see Notes of Survey, of S. bdy. of this Tp., Book E.

By surveying the S. and W. bdys. of this Tp., I find that its exteriors will not close; therefore, I test the the courses and lengths of lines on E. bdy. thereof, as follows:-

August 24, 1899: I set off 37°28' N. on the lat. arc; 110 2' N. on the decl. arc; and, at 10^h a.m., l.m.t., determine a true meridian with the solar, at the cor. of Tps. 36 and 39 S., Rs. 15 and 16 W., as heretofore described in Notes of Survey of S. bdy. of this Tp.

Thence I run.

N., on Pine Valley Guide Meridian, retracing the line bet. secs. 31 and 36.

Ascend rapidly over S.E. slope of ridge covered with large trachyte boulders; through scattering pine and cedar timber, and dense sage, greasewood and service berry undergrowth.

15.00 Top of ascent about 125 ft. above the Tp. cor., bears N.E. and S.W.; thence over top of ridge. Leave cedars and pines bears N.E. and S.W.

28.00 Re-enter scattering pines and cedars, bears S.E. and N.W.

31.50 Begin gradual descent over N.E. slope of ridges, bears S.W. and N.E.

40.24 Fall 2 lks. E. of the old 1/4 sec. cor., which is a trachyte stone 10x10x6 ins., above ground, marked and witnessed as described by the Surveyor General.

48.15 Foot of ridges and trail, bears N.W. and S.E.; ascend gradually.

58.00 Begin ascent of S. slope of foot hills, bears E. and W.

59.32 Trail bears N.E. and S.W.

66.50 Old road bears E. and W. Ascend more rapidly on S.E. slope.

68.37 Creek about 4 lks. wide and 18 ins. deep with clear.

Retracement of E.bdy. of T.38 S., R.16 W. (Pine Valley Guide Merid

Chains.	fresh water about 4 ins. deep, drains S. 45° W. about 8.00 chs., thence on a winding course Westerly to Vance's reservoir at head of his farm in N. central part of sec. 36, and about 35.00 chs. dist from line.
- 80.20	The cor. of secs. 25, 30, 31 and 36, which is a trachyte stone 12x12x8 ins. above ground, marked and witnessed as described by the Surveyor General. The course of this line is therefore due North. This cor. is on Southerly slope of high ridge about 150 ft. above the 1/4 sec. cor. Land mountainous and broken ridges. Soil, clay, gravelly and stony; 4th. rate. Timber, scattering nut pine and cedars. Undergrowth, sage, greasewood and service berry, which with shrubbery and grasses in abundance afford good grazing. Mountainous land and dense undergrowth on 80.20 chs.
	From the cor. of secs. 25, 30, 31 and 36 on E. bdy. of Tp., as above described, I run N., retracing line bet. secs. 25 and 30. Ascend abruptly over broken ledges and large boulders on S. and S.W. slopes of ridges; through scattering pines and cedars, and dense oak and service berry undergrowth.
8.00	Top of abrupt ascent bears S.E. and N.W.; begin more gradual ascent on S.W. slope of ridge.
33.00	Top of ascent about 150 ft. above the sec. cor., bears N. 10° E. and S. 100° W.; descend rapidly over W. slope of ridges; timber increases in density.
39.90	Fall 2 lks. W. of the old 1/4 sec. cor., which is a trachyte stone 12x6x5 ins. above ground, marked and witnessed as described by the Surveyor General.
44.00	Hollow at foot of descent about 50 ft. below the 1/4 sec. cor., drains S.W.; ascend on S.E. slope of ridges.
63.00	Ravine about 150 lks. wide and 50 ft. deep, drains S. 20° W.; ascend more rapidly on E. slope of ridges.
79.80	The old cor. of secs. 19, 24, 25, and 30, near top of divide, which is a granite stone 10x10x4 ins. above ground,

Retracement of E.bdy.of T.38 S.,R.16 W.(Pine Valley Guide Meridian.)

Chains. marked and witnessed as described by the Surveyor General, with this exception, viz: The bearing tree is 113 lks. dist. from the cor. instead of 125 lks. as given in notes furnished by the Surveyor General.

The course of this line is therefore due North, and the distance from the Tp. cor. agrees with the original survey.

Land mountainous and very rough and broken.

Soil, clay and gravel covered with rocks and boulders; 4th. rate.

Timber, scattering pines and cedars on N. and S., and medium dense on central part.

Undergrowth, shrubbery and grasses in abundance affords good grazing.

Mountainous land and dense undergrowth on 79.80 chs.

August 24, 1899: At this sec. cor., I set off $110^{\circ} 0' N.$ on the decl. arc; and, at 0h2' p.m., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ} 29' N.$

From the cor. of secs. 19, 24, 25 and 30, above described, I run N. on a blank line bet. secs. 19 and 24; at 40.00 chs. I find no trace of the old $1/4$ sec. cor. after diligent search; and at 80.00 chs., the cor. of secs. 13, 18, 19 and 24, which is a trachyte stone $24 \times 10 \times 7$ ins. properly marked, and witnessed with a mound of stone, bears $S. 90^{\circ} 28' W.$, 3.04 chs. dist.; therefore, I continue my line N., find no part of the E. bdy. in alinement and distances defective. At 273.46 chs. fall 2.84 chs. W. of the old $1/4$ sec. cor. bet. secs. 1 and 6, which is a granite stone $10 \times 10 \times 5$ ins. above ground, marked and witnessed as described by the Surveyor General; and at 313.46 chs., I make diligent search for the old cor. of Tps. 37 and 38 S., R. 15 W., but find no trace of same. Set temp. cor. of Tps. 37 and 38 S., R. 16 W. on Pine Valley Guide Meridian.

August 24, 1899.

Retracement of E.bdy of T.38 S., R.16 W. (Pine Valley Guide Meridian)

Chains. August 25, 1899: I set off 37°33' N. on the lat. arc; 100°41' N. on the decl. arc; and, at 10h a.m., l.m.t., determine a true meridian with the solar, at the temporary cor. of Tps. 37 and 38 S., R.16 W., established by me, on the Pine Valley Guide Meridian, thence I run N., on E.bdy. of sec. 36, in T.37 S., R.16 W.; and, at 41.20 chs., fall 183 lks. W. of the old 1/4 sec. cor., which is a trachyte stone 12x8x6 ins. above ground, properly marked and witnessed with mound of stone; this distance being used in the re-establishing of the cor. of T.37 and 38 S., R.16 W.

Thence from this 1/4 sec. cor. on E.bdy. of sec. 36, I run S., 0°43' E. on a true line on E.bdy. of sec. 36; this course determined by blank line.

Difference bet. measurements of 40.60 chs., by two sets of chainmen, is 8 lks.; position of middle point

By 1st. set, 40.64 chs.,

By 2nd. set, 40.56 chs.; the mean of which is

40.60 Set a trachyte stone 30x15x8 ins., 23 ins. deep in a mound of stone, for re-established cor. of Tps. 37 and 38 S., R.16 W., marked 38 S. on S.W., and 37 S., 16 W. on N.W. faces, with 6 notches on N., S. and W. edges, and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. This cor. is in bed of creek, about 5 lks. N. of stream of water, which is about 10 lks. wide and 4 ins. deep, and drains N. 70° W.

I continue my line S. 0°43' E., bet. secs. 1 and 6.

Difference bet. measurements of 81.20 chs., by two sets of chainmen, is 18 lks.; position of middle point

By 1st. set, 81.11 chs.,

By 2nd. set, 81.29 chs.; the mean of which is

81.20 The old 1/4 sec. cor. on E.bdy. of sec. 1, heretofore described.

August 25, 1899: I set off 100°39' 30" N. on the decl. arc; and, at 0h 2' p.m., l.m.t., observe the sun on the meridian, at this 1/4 sec. cor.; the resulting lat. is 37°32' 30" N.

August 25, 1899.

Mayhew H. Galley
U.S. Deputy Surveyor

Resurvey of E.bdy. of T.38 S., R.14 W. (Pine Valley Guide Meridian).

Chains.	<p>Resurvey commenced August 25, 1899, and executed with a W. and L. E. Gurley Light Mountain Solar Transit for description of which see Notes of Survey of S. bdy. of T.42 S., R.14 W., Book A.</p> <p>For complete solar test see Notes of Survey of S. bdy. of this Tp., Book E.</p> <p>By retracing the E. bdy. of the Tp., I find the N. 4 miles thereof defective in courses and lengths of lines; and, as there are no subdivisional or Tp. lines depending thereon, I resurvey this portion of the Pine Valley Guide Meridian, through T.38 S., as follows:-</p> <p>From the old cor. of secs. 19, 24, 25 and 30, heretofore described in retracement of E. bdy. of this Tp., I run</p> <p>N., on Resurvey line bet. secs. 19 and 24, on Pine Valley Guide Meridian.</p> <p>Ascend S.E. slope of ridge; through dense oak and service berry undergrowth.</p> <p>3.00 Top of divide about 50 ft. above the sec. cor., bears N. 60° E. and S. 60° W.; descend over steep W. slope of high ridges.</p> <p>19.70 Trail bears N.W. and S.E.</p> <p>25.80 Ravine at foot of spur of ridge about 1.00 ch. wide and 50 ft. deep, drains W.; ascend rapidly on S. slope of spur.</p> <p>37.00 Top of spur about 100 ft. above the ravine, falls rapidly to W.; descend over N.W. and W. slope of spur and ridges.</p> <p>Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 8 lks.; position of middle point</p> <p>By 1st. set, 40.04 chs.,</p> <p>By 2nd. set, 39.96 chs.; the mean of which is</p> <p>40.00 Set a trachyte stone 18x10x6 ins., 12 ins. in the ground, for re-established 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.</p> <p>Find no trace of the old 1/4 sec. cor. after diligent</p>
---------	--

Resurvey of E.bdy. of T.38 S., R.16 W. (Pine Valley Guide Meridian.)

Chains. search. From the $1/4$ sec.cor., a small spring bears N. 60° W. about 15.00 chs. dist.

41.50 Trail bears N.E. and S.W.

62.00 Ravine at foot of descent, about 150 ft. below the $1/4$ sec.cor., about 50 lks. wide and 10 ft. deep, drains W. about 10.00 chs., thence S.W.; ascend S.E., E. and S. slopes of rocky ridges.

63.10 Trail bears E. and W.

71.50 E. foot of trachyte ledges about 50 ft. high, bears N. and S.

80.00 Difference bet. measurements of 80.00 chs., by two sets of chainmen, is 14 lks.; position of middle point
By 1st. set, 80.07 chs.,
By 2nd. set, 79.93 chs.; the mean of which is
Set a trachyte stone $15 \times 12 \times 5$ ins., 10 ins. in the ground, for cor. of secs. 13, 18, 19 and 24, marked with 3 notches on N. and S. edges; and raised a mound of stone 2 ft. base, $1 \frac{1}{2}$ ft. high, W. of cor.
Pits impracticable.
The cor. is on Southerly slope of high ridge, which is very rough and rocky.
I destroy all traces of the old cor. of secs. 13, 18, 19 and 24, heretofore described in notes of retracement of this bdy., which bears S. $90^{\circ}28'$ W., 3.04 chs. dist.
Land mountainous and broken ridges.
Soil, gravelly and stony; 4th. rate.
Timber, scattering cedars and nut pine on the ridges E. of line; and on the ridges W. of line on N. 10.00 chs.
Undergrowth, grasses and shrubbery in abundance, which make good grazing.
Mountainous land and dense undergrowth on 80.00 chs.

August 25, 1899.

August 26, 1899: I set off $37^{\circ}30'$ N. on the lat. arc; $10^{\circ}20'30''$ N. on the decl. arc; and, at 10h a.m., l.m. t., determine a true meridian with the solar, at the cor. of secs. 13, 18, 19 and 24, established by me as above described; thence I run

Resurvey of E.bdy.of T.38 S.,R.16 W.(Pine Valley Guide Meridian.)

Chains.	N.on resurvey line,bet.secs.13.and 18,on Pine Valley Guide Meridian.
	Ascend rapidly on S.and S.E.slope of rocky ridge; through medium dense oak and service berry brush.
11.35	Top of ridges about 150 ft.above the sec.cor.;bears N.E.and S.W.;descend rapidly over N.W.slope of high ridges.
12.00	Trail bears E.and W. ;leave medium dense undergrowth and enter dense sage,oak and service berry brush.
34.00	Foot of descent about 100 ft.above the top of ridge, falls rapidly to N.W.;ascend on S.E.slope of ridge. Difference bet.measurements of 40.00 chs.,by two sets of chainmen,is 10 lks.;position of middle point
	By 1st.set,40.05 chs.,
	By 2nd.set,39.95 chs.;the mean of which is
40.00	Set a gray granite stone 15x12x6 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;and raised a mound of stone 2 ft.base,1 1/2 ft.high,W. of cor. Pits impracticable.
	From this point the old 1/4 sec.cor.,which is a lava stone 16x10x8 ins.,properly marked and witnessed, bears S.35 1/20 E.,3.68 chs.dist. I destroy all traces of the old cor.
	This 1/4 sec.cor.is about 75 ft.above the foot of descent.
50.00	Top of ridge about 50 ft.above the 1/4 sec.cor., bears N.E.and S.W.;descend rapidly over N.W.slope of ridges.
56.65	Foot of descent about 50 ft.below the top of ridge, falls rapidly to N.W.;ascend rapidly on S.E.slope of ridge.
63.50	Top of spur of ridge about 75 ft.high,bears E.and W.; descend on steep N.W.slope of spur.
71.90	Foot of descent about 60 ft.below the top,falls rapidly Southwesterly.;ascend S.E.slope of ridge. Difference bet.measurements of 80.00 chs.by two sets of chainmen,is 18.lks.;position of middle point is
	By 1st.set,79.91 chs.,
	By 2nd.set,80.09 chs.;the mean of which is
80.00	Set a volcanic stone 15x12x5 ins.,10 ins.in the ground

Resurvey of E.bdy.of T.38 S.,R.16 W.(Pine Valley Guide Meridian.)

Chains.	<p>for cor.of secs.7,12,13 and 18,marked with 4 notches on S.and 2 notches on N.edges;and raised a mound of stone 2 ft.base,1 1/2 ft.high,W.of cor.</p> <p>Pits impracticable.</p> <p>This cor.is on S.E.slope of ridge about 75 ft.above foot of same.</p> <p>The old cor.of secs.7,12,13 and 18,which is a trachyte 15x10x10 ins.,properly marked and witnessed with a mound of stone,bears S.38°20' E.,4.97 chs.dist.</p> <p>I destroy all traces of this old sec.cor.</p> <p>Land mountainous and broken ridges.</p> <p>Soil,gravelly and stony;4th.rate.</p> <p>No timber,except scattering cedars and pine on the ridges E.of line.</p> <p>Undergrowth,shrubby and grasses in abundance afford good grazing.</p> <p>Mountainous land on 80.00 chs.</p>
8.00	<p>N.,on resurvey line bet.secs.7 and 12,on Pine Valley Guide Meridian.</p> <p>Ascend on S.E.slope of ridge;through dense sage,oak and service berry undergrowth.</p> <p>Top of ridge about 50 ft.above the sec.cor.,bears E. and W.;descend rapidly over N.E.slope of ridges.</p> <p>Difference bet.measurements of 40.00 chs.by two sets of chainmen,is 16 lks.;position of middle point is</p> <p>By 1st.set,39.92 chs.,</p> <p>By 2nd.set,40.08 chs.;the mean of which is</p>
40.00	<p>Set a trachyte stone 18x8x6 ins.,12 ins.in the ground, for 1/4 sec.cor.,marked 1/4 on W.face;and raised a mound of stone,2 ft.base,1 1/2 ft.high,W.of cor.</p> <p>Pits impracticable.</p> <p>The old 1/4 sec.cor.,which is a trachyte stone 24x24x18 ins.,properly marked and witnessed with a mound of stone,bears S.37° E.6.37 chs.dist., I destroy all traces of the old 1/4 sec.cor. This new 1/4 sec.cor. is on N.E.slope of ridges about 150 ft.below top of ridge.</p>

Resurvey of E.bdy. of T.38 S., R.16 W. (Pine Valley Guide Meridian.)

Chains. August 26, 1899: At this $1/4$ sec. cor., I set off 10018' 30' N. on the decl. arc; and, at 0h2m p.m., l.m.t., observe the sun on the meridian; the resulting lat is 37°32' N.

58.75 Trail bears N.W. and S.E.

74.40 Trail bears N.W. and S.E.

76.00 Wash at foot of descent about 100 ft. below the $1/4$ sec. cor., about 10 ft. wide and 4 ft. deep, drains N. 200 ft.; ascend on N.W. slope of ridge.

Difference bet. measurements of 60.00 cha., by two sets of chains, is 22 lkr.; position of middle point
By 1st. set, 79.69 cha.,

By 2nd. set, 60.11 cha.; the mean of which is

60.00 Set a trachyte stone 15x10x8 ins., 10 ins., in the ground, for cor. of sec. 1, 6, 7 and 12, marked with 5 notches on S. and 1 notch on N. edges; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, W. of cor. Pits impracticable. The cor. is on steep N.W. slope of ridge about 10 ft. above the wash.
From this cor., the old cor. of sec. 1, 6, 7 and 12, which is a trachyte stone 12x10x8 ins., properly marked and witnessed with a mound of stone, bears S. 24°41' E., 6.37 cha. dist. I destroy all traces of this old sec. cor.

Land mountainous and broken.

Soil, gravelly and stony; 4th. rate.

No timber, except scattering cedars and pines on the high ridges E. of line.

Undergrowth of sage, oak and service berry, with shrubbery and grasses in abundance afford good grazing.
Mountainous land on 60.00 cha.

N., on resurvey line bet. sec. 1 and 6, on Pine Valley Guide Meridian.

Through dense oak, service berry and sage undergrowth rapidly ascending on N.W. slope of ridge.

8.00 Top of ascent about 75 ft. above the sec. cor., bears E. and W.; thence along W. slope of ridge.

Resurvey of E.bdy.of T.38 S.,R.16 W.(Pine Valley Guide Meridian.)

Chains.

- 17.00 Commence to descend on N.W.slope of ridge.
Difference bet.measurements of 40.00 chs.by two sets of chainmen, is 14 lks.; position of middle point
By 1st.set, 40.07 chs.,
By 2nd.set, 39.93 chs.; the mean of which is
- 40.00 Set a trachyte stone 16x10x6 ins., 11 ins. in the ground, for 1/4 sec.cor., marked 1/4 on W.face; and raised a mound of stone, 2 ft.base, 1 1/2 ft.high, W. of cor. Pits impracticable.
The old 1/4 sec.cor.heretofore described, bears S.230 32' E., 7.11 chs.dist. I destroy all traces of this old 1/4 sec.cor.
The new 1/4 sec.cor.is about 100 ft.below where descent begins on N.W.slope of ridge.
- 52.10 Wash at foot of spur about 50 ft.below the 1/4 sec.cor., about 8 ft.wide and 4 ft.deep, drains N.W.; ascend S.W.slope of spur.
- 54.00 Top of spur about 75 ft.high, bears S.E.and N.W.; descend over N.E.slope.
- 62.40 Trail bears N.70°W.and S.70° E.
- 62.50 Wash about 25 lks.wide and 4 ft.deep, drains N.W.; ascend steep S.W.slope of spur.
- 64.00 Top of spur of ridge about 60 ft.high, bears S.E.and N.W.; descend over N.E.slope of spur.
- 67.50 Trail at foot of spur, about 75 ft.below the top, bears N.30° E.and S.30° W.; foot of spur bears N.W. and S.E.; gradual descent.
- 69.10 Wash about 10 lks.wide and 4 ft.deep, drains N.W.
Difference bet.measurements of 73.87 chs., by two sets of chainmen, is 18 lks.; position of middle point
By 1st.set, 73.78 chs.,
By 2nd.set, 73.96 chs.; the mean of which is
- 73.87 Intersect N.bdy.of Tp., S.85°13' W.(Course determined by retracement thereof hereafter reported), 2.34 chs. dist.from the cor.of Tps.37 and 38 S., R.16 W., as re-established by me and described in Notes of Retracement of E.bdy.of this Tp.
Set a yellow granite stone 18x12x4 ins., 12 ins. in the ground, for North East cor.of Tp.38 S., R.16 W., marked

Resurvey of E.bdy.of T.38 S.,R.16 W.(Pine Valley. Guide Meridian.)

Chains. 38 S.,16 W.,on S.W.face,with 6 notches on S.and W. edges;and raised a mound of stone,2 ft.base,1 1/2 ft high,S.W.of cor. Pits impracticable.
I destroy the marks of the cor.of Tps.37 and 38 S., R.16 W.,formerly re-established,that pertain to Tp. 38 S.,and re-establish same for S.E.cor.of Tp.37 S., R.16 W.,only. I also destroy the temp.Tp.cor.previously set.
Land mountainous and broken ridges.
Soil,gravelly and stony;4th.rate.
No timber.
The ground is covered with dense undergrowth shrubbery and grasses,which afford good grazing.
Mountainous land on 73.87 chs.
August 26,1899.

GENERAL DESCRIPTION:

For General Description see Notes of Survey of Subdivisions of this Tp.,Book H.
August 26,1899.

Mayhew H. Galley
U.S. Deputy Surveyor.

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PAGE

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Mayhew H. Dalley

....., United States Deputy Surveyor, to assist in running, measuring, and retracing & re-marking the lines and corners described in the foregoing field notes of the survey of the Pine Valley Guide Meridian, through Tps. 38 S., bet. Rs. 15 and 16 W., of the Salt Lake Base and Meridian, Utah,

Showing the respective capacities in which they acted:

Edward J. Higbee, Chainman.Max W. Woodbury, Chainman.David Dix, Chainman.William Macfarlane, Chainman.Heber Dalley, Moundman.

Moundman.

Heber Dalley, Axman.

Axman.

Hillman Dalley, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Mayhew H. Dalley

retracing & re-

....., United States Deputy Surveyor, in surveying all those parts or portions of the Pine Valley Guide Meridian, through Tps. 38 S., bet. Rs. 15 and 16 W.

of the Salt LakeBase and meridian, State of Utah, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for Utah.Edward J. Higbee, Chainman. Max W. Woodbury, Chainman.William Macfarlane, Chainman. David Dix, Chainman.Heber Dalley, Moundman.

Moundman.

Heber Dalley, Axman.

Axman.

Hillman Dalley, Flagman.

Subscribed and sworn to before me this 21st. day of December, 1899

My Commission Expires
March 19th, 1903Senora C. Dalley

Notary Public.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dalley, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Jacob B. Blair United States Surveyor General for Utah, bearing date of the 23rd day of January, 1899, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Pine Valley Guide Meridian, retraced and re- the Pine Valley Guide Meridian, through Tps. 38 S., bet. Rs. 15 and 16 W.

Base and meridian, in the State of Utah of the Salt Lake meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Mayhew H. Dalley
United States Deputy Surveyor.

Subscribed by said Mayhew H. Dalley, and sworn to before me }
this 31st day of May, 1901.



Edward Henderson
U. S. Surveyor General for Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Utah Salt Lake City, Utah April 17, 1902
The foregoing field notes of the survey of the Pine Valley Guide Meridian through Townships 38 South between Ranges 15 & 16 West of the Salt Lake Base & Meridian, Utah

executed by Mayhew H. Dalley
under his contract No. 224, dated January 23, 1899, having been critically examined, and the necessary corrections and explanations made, the said field notes, and all surveys they describe, are hereby approved.

Edward Henderson
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General

12712

Filed May 31, 1901.

ERA

245

4-679.

G.

BOOK A-282

J. S. B.

FIELD NOTES

Reclamation
OF THE SURVEY OF THE

North Boundary

of
Township 38 South Range 16 West

Of the *Valley Lake Base and* Meridian,

State of Utah

AS SURVEYED BY

Magness H. Palley, United States Deputy Surveyor,

Under his Contract No. *224*, dated *January 23*, 1899

Reclamation
commenced *August 28*, 1899

Reclamation
completed *August 29*, 1899

Reclamation 6.02.90

NAMES AND DUTIES OF ASSISTANTS.

Max H. Woodbury	Chairman
Edward J. Higley	Chairman
Albert Dally	Groundman
David Pix	Groundman
Albert Dally	Clerk
David Pix	Clerk
William Macfarlane	Flagman

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Volume
#
R0282

BOOK A-282

INDEX DIAGRAM.

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19	20	21	22	23	24
29	28	27	26	25	24
31	32	33	34	35	36

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Max W. Woodbury and Edward J. Higbee
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of N. bdy. of T. 38 S., R. 16 W., and S. bdy. of T. 36 S., R. 17 W., and retracement resurvey of E. bdy. of T. 36 S., R. 17 W. and S. bdy. of T. 36 S., R. 16 W., of Salt Lake Base and Meridian, Utah.

Max W. Woodbury, Chain.
Edward J. Higbee, Chain.

Subscribed and sworn to before me this 15th day of August, 1899.



My Commission Expires
March 20th, 1903

Senora C. Dally
Notary Public.

WE, Heber Dalley and David Dix
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of N. bdy. of T. 38 S., R. 16 W., and S. bdy. of T. 36 S., R. 17 W., and retracement resurvey of E. bdy. of T. 36 S., R. 17 W., and S. bdy. of T. 36 S., R. 16 W., of Salt Lake Base and Meridian, Utah.

Heber Dalley, Mound
David Dix, Mound

Subscribed and sworn to before me this 15th day of August, 1899.



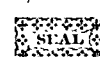
My Commission Expires
March 20th, 1903

Senora C. Dally
Notary Public.

WE, Heber Dalley and David Dix
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of N. bdy. of T. 38 S., R. 16 W., and S. bdy. of T. 36 S., R. 17 W., and retracement resurvey of E. bdy. of T. 36 S., R. 17 W., and S. bdy. of T. 36 S., R. 16 W., of Salt Lake Base and Meridian, Utah.

Heber Dalley, Ax.
David Dix, Ax.

Subscribed and sworn to before me this 15th day of August, 1899.



My Commission Expires
March 20th, 1903

Senora C. Dally
Notary Public.

I, William Macfarlane, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the retracement of N. bdy. of T. 38 S., R. 16 W., and S. bdy. of T. 36 S., R. 17 W., and survey of E. bdy. of T. 36 S., R. 17 W., and S. bdy. of T. 36 S., R. 16 W., of the Salt Lake Base and Meridian, Utah.

William Macfarlane, Flag

Subscribed and sworn to before me this 15th day of August, 1899.



My Commission Expires
March 20th, 1903

Senora C. Dally
Notary Public.

Retracement of N.bdy.of T.38 S.,R.16 W.

Chains.

Retracement commenced August 28, 1899, and executed with a W. and L. E. Gurley Light Mountain Solar Transit, for description of which see Notes of Survey of S. bdy. of T. 42 S., R. 14 W., Book A.

For complete solar test see notes of Survey of S. bdy. of this Tp., Book E.

Having heretofore retraced the E. bdy. of the Tp. and finding the N. 4 miles thereof irregular in bearing and defective in measurement, I deem it advisable to test the lines on the N. bdy. before commencing the regular subdivisions of the Tp.

August 28, 1899: I set off $37^{\circ}33'$ N. on the lat. arc; $90^{\circ}38'30''$ N. on the decl. arc; and, at 10^h a.m., l.m.t., determine a true meridian with the solar, at the cor. of Tps. 37 and 38 S., Rs. 16 and 17 W., heretofore described in Notes of Survey of the W. bdy. of this Tp.

Thence I run

E., on retracement line bet. secs. 6 and 31.

Over low foot hills and broken ridges sloping N. and N.W.

40.50 Fall 16 lks. N. of the old $1/4$ sec. cor., which is a quartzite stone 12x7x6 ins. above ground, marked and witnessed as described by the Surveyor General.

55.00 A gulch about 60 lks. wide and 25 ft. deep, drains N.W.

81.53 Fall 38 lks. S. of the old cor. of secs. 5, 6, 31 and 32, which is a sandstone 11x10x5 ins. above ground, marked and witnessed as described by the Surveyor General.

The course of this line is, therefore, N. $89^{\circ}44'$ E.

Land mountainous and broken ridges and foot hills.

Soil, clay, sandy, gravelly and stony; 3rd. and 4th. rate.

Timber, scattering cedars and pine.

Undergrowth of sage, oaks and service berry brush, with shrubbery and grasses afford fair grazing.

Mountainous land on 81.53 chs.

August 28, 1899: At this sec. cor., I set off $90^{\circ}36'30''$ N. on the decl. arc; and, at 0^h p.m., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ}33'$ N.

*589°46'E 40.50 chs.
for the first fall.
and 89°15'E 40.
for the second
fall mile.*

Retracement of N.bdy.of T.38 S.,R.16 W.-Continued.

Chains.	From the cor.of secs.5,6,31 and 32,on the N.bdy. of the Tp.,heretofore described,I run E.,on retracement line bet.secs.5 and 32. Ascend over broken ridges having general slope to N.and N.W.
26.00	Top of knoll about 150 ft.high.
39.80	Fall 2 lks.N.of the old 1/4 sec.cor.,which is a sandstone 18x4x10 ins.above ground,marked and witnessed as described by the Surveyor General.
54.00	Wash about 25 lks.wide and 6 ft.deep,drains N.W.
79.54	Fall 6 lks.N.of the old cor.of secs.4,5,32 and 33, which is a sandstone 13x8x5 ins.above ground,marked and witnessed as described by the Surveyor General. The course of this line is,therefore,S.89°57' E. Land mountainous and broken ridges. Soil,clay,gravelly and stony;2nd,3rd and 4th.rate. Timber,scattering cedars and pines on W.30.00 chs. Undergrowth of sage,oaks and service berry brush, shrubbery and grasses make good grazing. Mountainous land on 79.54. chs.
	From the cor.of secs.4,5,32 and 33,above described,I run E.,on retracement line bet.secs.4 and 33. Ascend over broken ridges,sloping N.and N.W.
9.50	Gulch about 80 lks.wide and 20 ft.deep,drains N.; ascend rapidly on N.W.and W.slope of high ridge.
31.60	Top of ridge and divide,about 250 ft.high,bears N. and S.;the town of Hamblin bears N.57° E.about 3 miles dist.;descend on E.and N.E.slope of divide.
40.00	Fall 18 lks.S.of the old 1/4 sec.cor.,which is a sandstone 10x10x8 ins.above ground,marked and witnessed as described by the Surveyor General.
80.10	Fall 41 lks.S.of the old cor.of secs.,3,4,33 and 34, which is a stationery sandstone 48x48x24 ins.above ground,marked and witnessed as described by the Surveyor General,on E.slope of high ridges,about 150 ft. below the top of divide.

Retracement of N.bdy. of T.38 S., R.16 W.-Continued.

Chains.	<p>The course of this line is therefore, N. $89^{\circ}42'$ E. ...</p> <p>Land mountainous and broken ridges. ...</p> <p>Soil, sandy and stony; 3rd. and 4th. rate. ...</p> <p>No timber, except scattering cedars and pines on E. 50.00 chs.</p> <p>Undergrowth of sage, oak and service berry, with shrubbery and grasses afford good grazing.</p> <p>Mountainous land on 80.10 chs. ...</p> <p>August 28, 1899.</p>
31.50	<p>From the cor. of secs. 3, 4, 33 and 34, above described I run ...</p> <p>E. on retracement line bet. secs. 3 and 34. ...</p> <p>Descend over E. slope of broken ridges, and foot hills.</p> <p>Telegraph line running from St. George to Hebron and Panaca, bears S. E. and N. W.; descend gradually over E. slope of foot hills.</p>
40.24	<p>Fall 4 lks. S. of the old $1/4$ sec. cor., which is a granite stone 10x10x4 ins. above ground, marked and witnessed as described by the Surveyor General.</p>
80.44	<p>Fall 10 lks. S. of the old cor. of secs. 2, 3, 34 and 35, which is a granite stone 18x6x6 ins. above ground, marked and witnessed as described by the Surveyor General. The course of this line is, therefore, N. $89^{\circ}56'$ E. ...</p> <p>Land mountainous and broken ridges and foot hills.</p> <p>Soil, stony, gravelly and clay; 2nd., 3rd. and 4th. rate.</p> <p>No timber. ...</p> <p>Undergrowth, medium dense sage and service berry brush and scattering oaks, which with shrubbery and grasses afford good grazing.</p> <p>Mountainous land on 80.44 chs. ...</p>
	<p>August 29, 1899: I set off $37^{\circ}33'$ N. on the lat. arc; $9^{\circ}17'$ N. on the decl. arc; and, at 10^h A., m. l. m. t., determine a true meridian with the solar, at the cor. of</p>

Retracement of N.bdy. of T. 38. S., R. 16. W.-Continued.

Chains.	secs. 2, 3, 34 and 35, already described; thence I run E., retracing line bet. secs. 2 and 35. Descend over E. and S.E. slope of foot hills and broken ridges, with course of drainage Northeastly and N.
4.50	Road from St. George to Modena, bears S. 30° W. and N. 30° E.
4.65	Trail bears N. 30° W. and S. 30° E.
7.50	Wash at foot of descent about 50 ft. below the sec. cor. about 25 lks. wide and 4 ft. deep, drains N. 100° E.; ascend over W. slope of low ridges.
16.50	Top of ascent of ridge about 75 ft. above the wash, bears N. and S.; thence over low broken ridges.
27.00	Wash about 10 lks. wide and 2 ft. deep, drains N. 250° E.
40.42	The old 1/4 sec. cor. on line, which is a granite stone 12x5x6 ins. above ground, marked and witnessed as described by the Surveyor General.
41.00	Wash 30 lks. wide and 5 ft. deep, drains N. 150° E.
48.00	Commence to descend on E. and N.E. slope of low ridges, bears S. E. and N. W.
65.65	Trail bears N. and S.
66.00	Wash at E. foot of ridges about 50 ft. below the top about 15 lks. wide and 3 ft. deep, drains N. 80° E. along the foot hills, and at about 75 lks. dist. turns N. 30° W., running along the foot of ridges. A small spring about 15.00 chs. S.E., drains into this wash. Ascend along the S.W. and S. slope of ridges.
70.20	Wash about 15 lks. wide and 3 ft. deep, drains N. 70° W.
80.71	Fall 11 lks. S. of the old cor. of secs. 1, 2, 35 and 36, which is a red sandstone 20x5x5 ins. above ground, marked and witnessed as described by the Surveyor General. The course of this line is therefore, N. 89° 55' E. Land mountainous and broken ridges. Soil, clay and gravelly; 3rd. rate. No timber. Undergrowth, medium dense sage and service berry brush, with shrubbery and grasses in sufficient quantity to make fair grazing. Mountainous land on 80.71 chs.

Retracement of N.bdy. of T.38 S., R.16 W.-Continued.

Chains. August 29, 1899: At this cor. of secs. 1, 2, 35 and 36, I set off $90^{\circ}15'$ N. on the decl. arc; and, at $01^{\text{h}}15^{\text{m}}$ p.m., 1.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ}33'$ N.

From the cor. of secs. 1, 2, 35 and 36, above described I run E. on retracement line bet. secs. 1 and 36.

Ascend gradually along S. and S.E. slope of ridges.

5.80 Wash 8 ft. wide and 4 ft. deep, drains S. 20° W. about 15.00 chs.; thence N.W.

24.00 Top of ascent about 75 ft. above the sec. cor., bears N.E. and S.W.; descend over S.E. slope into gulch.

28.03 Trail bears N. 70° E. and S. 70° W.

35.25 Wash in bottom of gulch about 100 ft. below top of ascent about 16 ft. wide and 6 ft. deep, drains N. 40° W. about 1.00 ch., thence N. 10° E.; ascend rapidly on N.W. and W. slope of ridge.

40.58 The old $1/4$ sec. cor., which is a surface granite rock $24 \times 20 \times 18$ ins. above ground, marked and witnessed as described by the Surveyor General.

Ruins of Canfield's cabin bears N. $3045'$ W., about 10.00 chs. dist.; and traces of an old field bears N. of cabin.

From this $1/4$ sec. cor., I continue E. on blank line, knowing from a test line previously run that the course of this $1/2$ mile will be materially changed; at 78.11 chs., fall 3.13 chs. S. of the N.E. cor. of T.38 S., R.16 W., established by me as heretofore described in Notes of Resurvey of E. bdy. of T.38 S., R.16 W. (Pine Valley Guide Meridian.), Book F; and at 80.44 chs., fall 3.32 chs. S. of the re-established cor. of Tps. 37 and 38 S., R.16 W., as remarked for S.E. cor. of T.37 S., R.16 W., only, and heretofore described in Notes of Retracement of the E. bdy. of T.38 S., R.16 W. (Pine Valley Guide Meridian.), Book F.

The course of this last $1/2$ mile is, therefore, N. $85^{\circ}13'$ E. I return to the $1/4$ sec. cor., bet. secs. 1 and 36 and continue measurements therefrom, running

Retracement of N.bdy. of 38 S., R. 16 W. - Continued.

Chains. N. 85° 13' E. on a true line.

63.50. Ravine about 70 lks. wide and 20 ft. deep, drains N.

67.48 Top of spur of ridge about 75 ft. above the 1/4 sec. cor., bears N. 70° W. and S. 70° E.; descend over N. E. slope of spur.

74.50 Foot of spur about 75 ft. below the top, bears N. 60° W. and S. 60° E.; trail bears N. 30° W. and S. 30° E.; descend more gradually.

76.50 Wash about 25 lks. wide and 8 ft. deep, drains N. 30° W.

78.10 The N. E. cor. of T. 38 S., R. 16 W., above described.

78.40 Descend over bank about 10 ft. high into creek bottom, bears S. 80° E. and N. 80° W.; thence along the creek bottom.

80.39 Hamblin creek, clear fresh water, rocky bottom, medium current, about 10 lks. wide and 4 ins. deep, drains N. 70° W.

80.58 The cor. of Tps. 37 and 38 S., R. 16 W., remarked for S. E. cor. of T. 37 S., R. 16 W., as heretofore described.

Land mountainous and broken ridges.

Soil, gravelly and stony, clay and sandy; 4th. 3rd. and 2nd. rate.

No timber.

Dense sage and oak undergrowth with shrubbery and grasses afford fair grazing.

Mountainous land on 74.50 chs.

August 29, 1899.

GENERAL DESCRIPTION:

For General Description see Notes of Survey of Subdivisions of T. 38 S., R. 16 W., Book H.

August 29, 1899.

Mayhew H. Dalley
U. S. Deputy Surveyor.

Retracement of N.bdy.of T.38 S.,R.16 W.)-Continued.

BOUNDARIES OF T.38 S.,R.16 W.						
Latitudes, Departures and Closing Errors.						
Line Designated.	True Bearing.	Distance	Latitudes.		Departures.	
			N.	S.	E.	W.
		Chs.	Chs.	Chs.	Chs.	Chs.
{ S. Bdy. T.38 S., R.16 W.	West	480.80				480.80
{ W. Bdy. T.38 S., R.16 W.	North	470.40	470.40			
{ N. bdy: T.38 S., R.16 W.						
	N. 89° 44' E.	81.53 ✓	.38 ✓		81.53 ✓	
	S. 89° 57' E.	79.54 ✓	.06 ✓		79.54 ✓	
	N. 89° 42' E.	80.10,	.41 ✓		80.10 ✓	
	N. 89° 56' E.	80.44 ✓	.10 ✓		80.44 ✓	
	N. 89° 55' E.	80.71 ✓	.11 ✓		80.71 ✓	
	East.	40.58 ✓			40.58 ✓	
	N. 85° 13' E.	37.66 ✓	3.13 ✓		37.53 ✓	
{ E. bdy. T.38 S., R.16 W. - Pine Valley Guide Meridian.	South.	473.87 ✓		473.87		
Convergency					.55	
Totals			474.59 ✓ 473.87	473.87	480.98	480.80.
Error in lat.			.72 ✓			
Error in dep.					480.80 .18	

August 29, 1899.

Mayhew H. Galley
U.S. Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by

....., United States Deputy Surveyor, to assist in running, measuring, and
marking the lines and corners described in the foregoing field notes of the survey of

....., showing the respective capacities in which they acted:

....., Chainman.

....., Chainman.

....., Moundman.

....., Moundman.

....., Arman.

....., Arman.

....., Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted

....., United States Deputy Surveyor, in surveying all
those parts or portions of the

..... of the
..... meridian, of, which are represented
the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
other monuments established, according to the instructions furnished by the United States Surveyor
General for

....., Chainman.

....., Chainman.

....., Moundman.

....., Moundman.

....., Arman.

....., Arman.

....., Flagman.

described and sworn to before me this }
day of, 189..... }



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew D. Valley United States Deputy Surveyor
solemnly swear that, in pursuance of a contract received from Jac B B M.
United States Surveyor General for Idaho, bearing date of
23^d day of January, 1899, I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Su.
General for Idaho, the Manual of Surveying Instructions, and the laws of
United States, ^{retraced} surveyed all those parts or portions of the North Branch of
Township 38 South Range 16 West of the Salt Lake

of the Salt Lake
Base & meridian, in the State of Idaho, which are represented in
foregoing field notes as having been ^{retraced} surveyed by me, and under my direction; and I do further sol-
swear that all the corners of said survey have been established and perpetuated in strict accordance
the Manual of Surveying Instructions, and the special written instructions of the United States Su.
General for Idaho and in the ^{retracement} specific manner described in the field notes, and
the foregoing are the original field notes of such survey; and should any fraud be detected, I will
the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Mayhew D. Valley
United States Deputy Su.

Subscribed by said Mayhew D. Valley, and sworn to before me }
this 31st day of May 1899



Edward H. Anderson
U.S. Surveyor General for Idaho

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Valh dated by Idaho April 17 1902
The foregoing field notes of the ^{retracement} survey of the North Branch of
Township 38 South Range 16 West of the Salt Lake
Base & Meridian, Idaho

executed by Mayhew D. Valley
under his contract No. 224, dated January 23, 1899, having
critically examined, and the necessary corrections and explanations made, the said field notes, &
^{retracement} surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor.

I certify that the foregoing transcript of the field notes of the above-described surveys in
has been correctly copied from the original notes on file in this of

United States Surveyor General

July May 31, 1901. 259
Est. 1870

4-679.

H.
BOOK A-282

J. S. B.

FIELD NOTES

OF THE SURVEY OF THE

Subdivisions

Township 38 South Range 16 West

of the *South Lat. Base* and Meridian,

State of Utah

AS SURVEYED BY

Magdalen H. Valley, United States Deputy Surveyor,

Under his Contract No. *224*, dated *January 23*, 1899

Survey commenced *August 30th*, 1899

Survey completed *September 16th*, 1899

6-181

Sub-high 56-17-48 ✓
" low 3-20-97 ✓
Changes - 4-75 ✓
59-45

NAMES AND DUTIES OF ASSISTANTS.

Mr. W. W. Wadley	Chairman
Edward J. Bigler	Chairman
Walter D. Dally	Chairman
David D.	Chairman
Walter Dally	Chairman
David Dix	Chairman
William Macfarlane	Chairman

BOOK A-282

INDEX DIAGRAM.

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19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Max W. Woodbury and Edward J. Higbee
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the Subdivisions of T.38 S., R.16 W.; T.36 S., R.17 W.; and T.36 S., R.16 W., of the Salt Lake Base and Meridian, Utah.

Max W. Woodbury, Chainman.
Edward J. Higbee, Chainman.

Subscribed and sworn to before me this 15th day of August, 1899.



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public.

WE, Heber Dalley and David Dix
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the Subdivisions of T.38 S., R.16 W.; T.36 S., R.17 W.; and T.36 S., R.16 W., of the Salt Lake Base and Meridian, Utah.

Heber Dalley, Moundman.
David Dix, Moundman.

Subscribed and sworn to before me this 15th day of August, 1899.



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public.

WE, Heber Dalley and David Dix
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of the Subdivisions of T.38 S., R.16 W.; T.36 S., R.17 W.; and T.36 S., R.16 W., of the Salt Lake Base and Meridian, Utah.

Heber Dalley, Axman.
David Dix, Axman.

Subscribed and sworn to before me this 15th day of August, 1899.



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public.

I, William Macfarlane, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the Subdivisions of T.38 S., R.16 W.; T.36 S., R.17 W.; and T.36 S., R.16 W., of the Salt Lake Base and Meridian, Utah.

William Macfarlane, Flagman.

Subscribed and sworn to before me this 15th day of August, 1899.



My Commission Expires
March 20th, 1903

Senora C. Dalley
Notary Public.

Subdivisions of T.38 S., R.16 W.

Chains. Survey commenced August 30, 1899, and executed with a W. and L. E. Gurley Light Mountain solar Transit, for description of which see notes of Survey of S. bdy. of T. 42 S., R. 14 W., Book A.

For complete solar test see Notes of Survey of S. bdy. of this Tp., Book E.

I commence at the cor. of secs. 1, 2, 35 and 36, on the S. bdy. of the Tp., which I established Aug. 19, 1899.


Thence I run

N. 0° 1' W., bet. secs. 35 and 36.

Gradually ascend through medium dense cedar and nut pine timber.

- 16.00 Leave cedars and pines and enter dense sage undergrowth bears E. and W.
- 20.00 Road to Vance's Rancho running N. 20° E., bears E. about 2.00 chs. from line.
- 26.50 Begin ascent of S. W. slope of high ridge, bears S. E. and N. W.; and leave dense sage undergrowth.
- 31.00 Enter scattering cedars and nut pine timber, bears S. E. and N. W.
- 38.00 Enter dense pine and cedar timber and leave scattering cedars and pines, bears E. and W.
- 40.00 Set a white sandstone 15x14x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4' on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Afterwards marked bearing trees as follows:
 A nut pine 8 ins. diam., bears N. 52° 30' E., 27 lks. dist., marked
 1/4 S., 36, B. T.
 A cedar 12 ins. diam., bears S. 74° 30' W., 16 lks. dist., marked
 1/4 S. 35, B. T.
 The cor. is on S. W. slope of ridge about 100 ft. above the the sec. cor.
- 53.20 Trail bears E. and N. 85° W.
- 60.00 Begin ascent of S. E. slope of upper ridge bears N. E. and S. W.
- 65.00 Vance's cabin with orchard and fenced field of about

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	15 acres in narrow valley, bears S.81° E. about 42.00 chs.
77.50	Top of spur of ridge about 300 ft. high, bears S.W. and N.E.; descend over N.W. slope of spur.
80.00	Set a gray granite stone 24x12x8 ins. 18 ins. in the ground for cor. of secs. 25, 26, 35 and 36, marked with 1 notch on S. and E. edges; from which A nut pine 8 ins. diam., bears N.42° W., 46 lks. dist., marked T.38 S., R.16 W., S.26, B.T. A cedar 16 ins. diam., bears N.36° E., 99 lks. dist., marked T.38 S., R.16 W., S.25, B.T. A cedar 12 ins. diam., bears S.30° 45' W., 83 lks. dist., marked T.38 S., R.16 W., S.35, B.T. A cedar 12 ins. diam., bears S.34° E., 78 lks. dist., marked T.38 S., R.16 W., S.36, B.T. Land mountainous and broken; Soil, sandy, clay and stony; 3rd. and 4th. rate. Timber, dense and scattering pines and cedars; undergrowth; sage and greasewood. Fair grazing. Mountainous land on 80.00 chs.
	E. on a random line bet. secs. 25 and 36.
40.00	Set temp. 1/4 sec. cor.
80.16	Intersect E. bdy. of Tp. (Pine Valley Guide Meridian), 28 lks. S. of the cor. of secs. 25, 30, 31 and 36, heretodescribed in notes of retracement of this bdy. Book.  . Thence I run S.89° 48' W. on a true line bet. secs. 25 and 36. Descend rapidly over rocky S.W. slope of ridge; through medium dense cedar and pine timber.
10.00	Bottom of hollow at foot of ridges about 100 ft. below the sec. cor., drains S.; trail in hollow follows course

Subdivisions of T.38 S., R.16 W.-Continued.

- Chains. of hollows.; ascend on S.E. slope of spur of ridge.
- 16.50 Top of spur about 50 ft. high, bears N. and S.; descend over S.W. slope of spur.
- 33.00 Wash at foot of descent about 6 ft. wide and 4 ft. deep, drains S. 30° W.; ascend.
- 38.00 Top of spur on S. slope of ridge about 50 ft. high, bears N. and S.; descend.
- 40.08 Set a white limestone 15x10x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; from which
- A nut pine 8 ins. diam., bears S. 61° 30' E., 24 lks. dist., marked
- 1/4 S. 36, B.T.
- A nut pine 8 ins. diam., bears N. 20° 30' W., 15 lks. dist., marked
- 1/4 S. 25, B.T.
- William Vance's house, farm orchard and corralls adjoining same with small reservoir on E., bears South about 22.00 chs.
- 41.05 Trail bears N. 30° W. and S. 30° E.
- 41.60 Wash at foot of descent about 25 ft. below the 1/4 sec. cor., 10 ft. wide and 4 ft. deep, drains S. 30° E.; ascend over broken spurs and ridges on S.E., and S. slopes of high mountain.
- 78.00 Top of spur of main ridge about 250 ft. below the 1/4 sec. cor., bears S. 40° W. and N. 40° E.; descend over N.W. slope.
- 80.16 The cor. of secs. 25, 26, 35 and 36, about 50 ft. below top of ridge.
- Land mountainous and broken.
- Soil, sandy, clay and stony; 4th. rate. About 15 acres sandy and clay soils in N. 1/2 of sec. 36, suitable for cultivation; 2nd. rate.
- Timber, medium dense and scattering nut pine and cedars; undergrowth, scattering sage, greasewood and service berry, with very few oaks in Eastern part.
- Undergrowth, shrubbery and grasses afford good grazing.
- Mountainous land on 80.16 chs.
- August 30, 1890: At this sec. cor., I set off 8.54'

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	N. on the decl. arc; and, at 12 ^h M., l.m.t., observe the sun on the meridian; the resulting lat is 37° 28' 36" N.
	N. 0° 1' W., bet. secs. 25 and 26, gradually descending over N.W. and W. slopes of spur of ridge.
4.00	Bottom of hollow about 50 ft. below the sec. cor., drains W.; ascend over W. and S.W. slope of high ridge.
25.00	Top of ridge on summit of mountain about 150 ft. above the sec. cor., bears E. and W.; descend rapidly over N. slope of high mountain.
40.00	Set a granite stone 12x10x6 ins., 8 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Corner is on N. slope of mountain about 150 ft. below the top.
46.30	Ravine about 70 ft. wide and 50 ft. deep, drains N. 30° W.
74.80	Wash at foot of descent, about 150 ft. below the 1/4 sec. cor., about 10 ft. wide and 4 ft. deep, drains S. 30° W.; ascend from wash.
75.55	Trail bears S. 30° W. and N. 30° E.
80.00	Set a quartzite stone 18x10x6 ins., 12 ins. in the ground, for cor. of secs. 23, 24, 25 and 26, marked with 2 notches on S. and 1 notch on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor., afterwards marked bearing trees as follows: A nut pine 14 ins. diam., bears N. 15 3/4° W. 82 lks. dist., marked T. 38 S., R. 16 W., S. 23, B. T. A cedar 10 ins. diam., bears N. 51 3/4° E., 43 lks. dist., marked T. 38 S., R. 16 W., S. 24, B. T. A cedar 24 ins. diam., bears S. 88 1/2° W., 13 lks. dist., marked T. 38 S., R. 16 W., S. 26, B. T. A nut pine, 8 ins. diam., bears S. 55 3/4° E., 51 lks. dist., marked T. 38 S., R. 16 W., S. 25, B. T.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	Land mountainous. Soil, gravelly and stony; 3rd. and 4th. rate. Timber, scattering nut pine and cedars. Undergrowth of sage, service berry and iron wood, with shrubbery and grasses afford good grazing. Mountainous land on 80.00 chs.
	August 30, 1899: I set off $37^{\circ}29'$ N. on the lat. arc; $8^{\circ}50'30''$ N. on the decl. arc; and, at 4 ^h p.m., l.m.t., de- termine a true meridian with the solar, at the cor. of secs. 23, 24, 25 and 26, heretofore described. Thence I run N. $89^{\circ}48'$ E. on a random line bet. secs. 24 and 25.
40.00	Set temp. $1/4$ sec. cor.
79.98	Intersect E. bdy. of Tp. (Pine Valley Guide Meridian.), 32 lks. N. of the old cor. of secs. 19, 24, 25 and 30, heretofore described in Notes of Retracement of this boundary.
	Thence I run N. $89^{\circ}58'$ W. on a true line bet. secs. 24 and 25. Ascend over E. and N.E. slope of ridge.
II.00	Top of rocky ridge about 75 ft. above the sec. cor., bears N.W. and S.E.; descend rapidly over W. and N.W. slope of ridges.
39.99	Set a volcanic stone $24 \times 12 \times 10$ ins., 18 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone 2 ft. base, $1 1/2$ ft. high, N. of cor. Pits impracticable. The cor. is on N.W. slope of ridge, about 150 ft. below the top.
49.18	Ravine about 150 lks. wide and 50 ft. deep, drains N.W.
77.28	Wash at foot of ridges about 150 ft. below the $1/4$ sec. cor., about 10 ft. wide and 3 ft. deep, drains S. 60° W.; ascend from ravine.
77.33	Trail bears N. 20° E. and S. 20° W.
79.98	The cor. of secs. 23, 24, 25 and 26, about 50 ft. above Wash. Land mountainous and very rough.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	Soil, gravelly and stony; 4th. rate. Timber, scattering pine and cedars. Undergrowth, Dense oak and service berry on E. 50. chs.; medium dense on W. 29.98 chs. Undergrowth, shrubbery and grasses afford good grazing. Mountainous land on 79.98 chs. August 30, 1899.
	August 31, 1899: I set off 37° 29' N. on the lat. arc; 80° 35' N. on the decl. arc; and, at 9 ^H a.m., l.m.t., determine a true meridian with the solar, at the cor. of sec. 23, 24, 25 and 26; already described; thence I run N. 0° 1' W. bet. secs. 23 and 24. Ascend over S.E. slope of ridges.
7.00	Top of ridge about 175 ft. high, bears S. 20° W. and N. 20° E.; descend.
9.00	Foot of ridge about 50 ft. below the top, bears E. and W. Ascend S. slope of ridge.
15.00	Top of spur, about 200 ft. high, bears N. and S.; ascend gradually.
25.00	Top of ascent, about 25 ft. above top of spur, bears E. and W.; descend.
29.00	Foot of ridge about 50 ft. below the top of ascent, bears E. and W.; ascend S. slope of ridge.
35.00	Top of ridge covered with porphyry boulders, about 200 ft. high, bears S.E. and N.W.; descend on N.E. slope of ridge.
40.00	Set a granite stone 18x12x5 ins., 12 ins. in the ground for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. The cor. is on N.E. slope of ridge about 50 ft. below the top, and about 200 ft. above the sec. cor.
43.00	Ravine at foot of ridges, about 100 ft. below top of ridge, about 150 lks. wide and 25 ft. deep, drains S.E.; ascend on S.E. slope of ridge.
80.00	Top of ridge about 350 ft. high, bears E. and W.

Subdivisions of T.38 S., R.16 W.--Continued.

Chains.	Set a gray granite stone 20x12x6 ins., 15 ins. in the ground, for cor. of secs. 13, 14, 23 and 24; marked with 3 notches on S. and 1 notch on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Land mountainous and broken. Soil, gravelly and stony; 4th. rate. Timber, medium dense nut pine and cedars on 1st. 15.00 chs.; scattering pines and cedars on N. 65.00 chs. Undergrowth, greasewood, oak, sage, with shrubbery and grasses, which afford fair grazing. Mountainous land on 80.00 chs.
40.00	S. 89° 58' E. on a random line bet. secs. 13 and 24. Set temp. 1/4 sec. cor.
79.94	Intersect E. bdy. of Tp. (Pine Valley# Guide Meridian.); 30 lks. N. of the cor. of secs. 13, 18, 19 and 24, re-established in resurvey of E. bdy. of this Tp., heretofore described in Notes thereof. Thence I run. N. 89° 45' W. on a true line bet. secs. 13 and 24. Ascend abruptly over E. and S.E. slope of rocky ridge.
3.00	Top of rocky spur of ridge about 125 ft. above the sec. cor.; bears N. and S.; thence along the S., S.W., S.E., and S. slopes of high ridge or divide.
39.97	Set a gray granite stone 12x10x6 ins., 8 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. N. of cor. Pits impracticable.
50.00	Ravine about 3.00 wide and 100 ft. deep, drains S. 40° W.
79.94	The cor. of secs. 13, 14, 23 and 24. Land mountainous and very rough. Soil, gravelly and stony; 4th. rate. No timber, except very few scattering cedars and nut pine. Dense oak and service berry undergrowth with shrubbery and grasses afford good grazing. Mountainous land on 79.94 chs.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains. August 31, 1899: At this cor. of secs. 13, 14, 23 and 24, I set off $80^{\circ}32'30''$ N. on the decl. arc; and, at 12^h M., 1.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ}35'40''$ N.

N. $0^{\circ}1'$ W. bet. secs. 13 and 14.

Descend over N. and N.E. slope of high ridge.

21.00 Wash at foot of ridge about 150 ft. below top of ridge about 8 ft. wide and 3 ft. deep, drains N.W.; ascend.

40.00 Set a granite stone $20 \times 12 \times 6$ ins., 15 ins. in the ground for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone, 2 ft. base, $1\ 1/2$ ft. high, W. of cor. Pits impracticable.

42.00 Top of spur of ridge about 75 ft. above the wash, bears E. and W.; descend on N.W. slope of spur.

55.50 Trail bears $S. 80^{\circ}W.$ and $N. 80^{\circ}E.$

58.10 Wash about 20 lks. wide and 5 ft. deep, drains $S. 80^{\circ}W.$

67.35 Trail bears N.W. and S.E.

69.90 Burgess creek, about 2 lks. wide and 18 ins. deep, with clear water, about 3 ins. deep, drains N.W.; heads at Burgess spring S.E. about 4.00 chs. from line.

73.50 Trail bears N.W. and S.E.

77.60 Wash about 15 lks. wide and 8 ft. deep, drains W.

80.00 Set a volcanic stone $16 \times 12 \times 5$ ins., 11 ins. in the ground, for cor. of secs. 11, 12, 13 and 14, marked with 4 notches on S. and 2 notches on E. edges; and raised a mound of stone, 2 ft. base, $1\ 1/2$ ft. high, W. of cor. Pits impracticable.

This cor. is about 350 ft. below the sec. cor. on top of ridge 1 mile South.

Land mountainous and broken ridges.

Soil, gravelly and stony; 4th. rate.

Timber, scattering cedars and nut pine on 1st. 15.00 chs.

Large oak in bunches along the line on N. $1/2$ of sec.; also service berry and small oak undergrowth, with shrubbery and grasses in sufficient quantity to make good grazing. Mountainous land on 80.00 chs.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

~~89.45~~ on a random line bet. secs. 12 and 13.

40.00 Set temp. $1/4$ sec. cor.

79.80 Intersect E. bdy. of Tp. (Pine Valley Guide Meridian.), 25 lks. S. of the cor. of secs. 7, 12, 13 and 18, established by me in Resurvey of this bdy., and described in notes thereof.

Thence I run

N. $89^{\circ}56'$ W. on a true line bet. secs. 12 and 13.

Descend over W. and S.W. slopes of ridges.

34.50 Ravine about 50 lks. wide and 20 ft. deep, drains S. 100° W.

39.90 Set a gray granite stone 12x10x8 ins., 8 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, N. of cor. Pits impracticable.

This cor. is on S.W. slope of ridges about 150 ft. below the sec. cor.

45.10 Ravine about 150 lks. wide and 50 ft. deep, drains N. 70° W.; ascend from ravine.

52.00 Top of spur about 75 ft. high, projects N.W.;

79.80 The cor. of secs. 11, 12, 13 and 14, which is about 125 ft. below the $1/4$ sec. cor.

Land mountainous and broken.

Soil, gravelly and stony; 4th. rate.

Timber, scattering cedars and nut pine.

Undergrowth, thick bunches of oaks along the line, also medium dense sage and serviceberry brush, with shrubbery and grasses which afford good grazing.

Mountainous land on 79.80 chs.

August 31, 1899.

N. $00^{\circ}1'$ W. bet. secs. 11 and 12.

Descend gradually over N.W. slope of low ridges and foot hills, cut with hollows and washes sloping generally W. and N.W.

6.75 Trail bears N. 300° E. and S. 300° W.

12.00 Wash about 30 lks. wide and 8 ft. deep, drains W.

Subdivisions of T.38 S., R.16 W.-continued.

Chains.

- 22.00 Foot of descent about 100 ft. below the sec. cor., bears N.E. and S.W.; ascend on S.W. slope.
- 39.00 Top of spur about 75 ft. high bears N.E. and N.W.; descend over N.W. slope of spur.
- 34.40 Bottom of hollow about 50 ft. below top of spur, drains W.; ascend on S.W. slope of spur and ridge.
- 40.00 Set a volcanic stone 12x10x6 ins., 8 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Corner about 50 ft. above last hollow on S.W. slope of ridge or spur.
- 42.50 Top of spur about 50 ft. above the 1/4 sec. cor., bears N.E. and S.W.; descend over N.W. slope of ridge or spur.
- 76.00 Foot of spurs and ridges about 150 ft. below the top, bears N. 70° E. and S. 70° W.; descend gradually.
- 80.00 Set a gray granite stone 12x10x8 ins., 8 ins. in the ground, for cor. of secs. 1, 2, 11 and 12, marked with 5 notches on S. and 1 notch on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
- Land mountainous and broken ridges.
Soil, gravelly and stony; 3rd. and 4th. rate. North 4.00 chs. rich clay soil; 2nd. rate.
Undergrowth, dense sage and scattering oak and service berry brush; shrubbery and grasses in sufficient quantity to make good grazing.
Mountainous land or land covered with dense undergrowth on 80.00 chs.

S. 89° 26' E. on a random line bet. secs. 1 and 12.

40.00 Set temp. 1/4 sec. cor.

79.70 Intersect E. bdy. of Tp., (Pine Valley Guide Meridian.), 27 lks. S. of the cor. of secs. 1, 6, 7 and 12, established by me in resurvey of this bdy., and heretofore described in the notes thereof.

September 1st., 1899: At this cor. I set off S. 81° 10' W. on the decl. arc; and, at 12^h M., l.m.t., observe the sun

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	on the meridian; the resulting lat is 37°32' N. Thence I run S.89°52'W. on a true line bet. secs. I and 12. Descend abruptly over W. slope of ridge.
3.00	Wash at foot of descent about 50 ft. below the sec. cor., about 15 lks. wide and 3 ft. deep, drains N.20°W. Ascend over N.E. slope of ridge.
3.73	Trail bears N. and S.
15.80	Top of spur of ridge about 75 ft. above the wash, bears N.30°W. and S.30°E.; descend rapidly over W. slope of spur and ridges.
27.80	Wash about 10 lks. wide and 4 ft. deep, drains S.80°W.
31.80	Trail bears N.10°W. and S.10°E.
33.30	Wash at foot of descent about 100 ft. below top of spur, about 15 lks. wide and 4 ft. deep, drains N.10°W.; ascend on N.E. slope of ridges.
38.20	Top of spur about 50 ft. high, bears S.E. and N.W.; descend over top of spur.
39.85	Set a trachyte boulder stone 40x30x12 ins., 30 ins. in deep in a mound of stone, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. Hard stone sur- face prevented setting the stone in the ground.
43.45	Ravine about 50 lks. wide and 25 ft. deep, drains N.10°W.
43.90	Trail bears N. and S.
69.70	Wash about 12 lks. wide and 4 ft. deep, drains N.W.
74.70	Foot of ridges about 125 ft. below the 1/4 sec. cor., bears S.70°W. and N.70°E.; thence gradually descend over nearly level ground.
79.70	The cor. of secs. I, 2, II and 12. Land mountainous and broken with W. 5.00 chs. nearly level. Soil, gravelly and stone; 3rd. and 4th. rate on 74.70 chs.; W. 5.00 chs. rich clay soil; 2nd. rate. Undergrowth, dense sage, and scattering oaks and ser- vice berry, with shrubbery and grasses in sufficient quantity to make fair grazing. No timber. Mountainous land and land covered with dense under- growth on 79.70 chs.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

- September 1st., 1899: I set off 37°32' N. on the lat. arc; 808' N. on the decl. arc; and, at 3^h p.m., 1.m.t., determine a true meridian with the solar, at the cor. of secs. 1, 2, 11 and 12, heretofore described.
- Thence I run N. 00°1' W. on a true line bet. secs. 1 and 2, knowing from previous retracement of N. bdy. and resurvey of E. bdy. of Tp., that a closing cor. will be necessary.
- Over nearly level ground with course of drainage to W.
- 3.75 Wash about 30 lks. wide and 8 ft. deep, drains W.
- 8.00 Wash about 30 lks. wide and 5 ft. deep, drains N. 70° W.; commence gradual ascent on S. slope of spur.
- 22.50 Top of spur about 50 ft. high, bears E. and W.; descend over N. W. slope of spur.
- 28.05 Trail bears N. W. and S. E.
- 33.85 Wash at foot of descent about 15 lks. wide and 5 ft. deep, drains W. about 2.00 chs., thence N. W.; ascend on S. W. slope of spur of ridge.
- 40.00 Set a trachyte stone 12x8x8 ins., 8 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
- 45.00 Top of spur about 75 ft. high, bears E. and W.; descend over N. W. slope of spur and ridges.
- 52.00 Enter valley or basin about 20.00 chs long and about 20.00 chs. wide, at N. foot of ridges, bears N. 60° E. and S. 60° W.; thence over rolling land, gradually descending to N. and N. W.
- 56.00 A small spring bears W. about 4.00 chs.; drains N. W.
- 58.00 Trail bears N. E. and S. W.
- 68.90 Wash about 15 lks. wide and 5 ft. deep, drains S. 85° W.; N. side of valley; ascend from wash.
- 71.02 Intersect N. bdy. of the Tp., 1.29 chs., S. 89° 55' W. from the old cor. of secs. 1, 2, 35 and 36, heretofore described in notes of retracement of N. bdy. of this Tp. Set a yellow sandstone 15x10x4 ins., 10 ins. in the ground, for closing cor. of secs. 1 and 2, marked C.C. on S., with 1 groove on E. and 5 grooves on W. faces; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of

012/30
35

Subdivisions of T.38 S., R.16 W.-Continued.

Chains. cor. Pits impracticable.

I destroy the marks on the old cor. of secs. 1, 2, 35 and 36, that pertain to secs. 1 and 2, and remark the same for cor. of secs. 35 and 36, T.37 S., R.16 W., only. Land partly mountainous and partly level and rolling. Soil, rich clay and gravelly; 2nd. and 3rd. rate. No timber.

Undergrowth, sage, oak and serviceberry in abundance, with shrubbery and grasses in sufficient quantity to make good grazing.

Mountainous land on 46.00 chs.

September 1st., 1899.

September 2, 1899: I set off $37^{\circ}28'$ N. on the lat. arc; $7^{\circ}51'30''$ N. on the decl. arc; and, at 9h a.m., l.m.t., determine a true meridian with the solar, at the cor. of secs. 2, 3, 34 and 35, on the S. bdy. of the Tp., established by me and described in Notes of Survey of this Bdy.

Thence I run

N. $00^{\circ}1'$ W., bet. secs. 34 and 35.

Descend over broken ridges and foot hills, cut with small washes and hollows with general course of drainage Southwesterly.

29.00 Wash at foot of descent about 50 ft. below the sec. cor., about 10 lks. wide and 4 ft. deep, drains N. 50° W. Ascend on S.E. and E. spur of ridge.

40.00 Set a granite stone $20 \times 8 \times 4$ ins., 15 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone, 2 ft. base, $1\ 1/2$ ft. high, W. of cor. Pits impracticable. Cor. is on E. slope of spur, about 50 ft. above the wash.

55.00 Top of spur of ridge about 75 ft. high, bears N. 40° E. and S. 20° W.; descend over N.W. slope of spur and ridges.

63.00 Foot of spur about 50 ft. below the top, bears S. 100° W. and N. 100° E.; descend more gradually.

77.00 Wire fence on S. side of field, bears N. 80° W. about

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	4.00 chs., and S.80°E. about 3.00 chs.; enter Brigham Young's field. (No relation to the late Brigham Young of the Mormon Church.)
80.00	Set a gray granite stone 18x10x8 ins., 12 ins. in the ground, for cor. of secs. 26, 27, 34 and 35, marked with 1 notch on S. and 2 notches on E. edges; dug pits 18x18x12 ins., in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor. This cor. is in uncultivated part of field. Land mountainous and broken ridges and rolling and level land. Soil on ridges, gravelly; in the field and along foot of ridges, rich clay and sandy loams with some gravel; 3rd., 2nd. and 1st. rate. Timber, scattering cedars and nut pine on S. 60.00 chs. Undergrowth, medium dense sage and service berry brush which with shrubbery and grasses afford fair grazing. Mountainous land on 63.00 chs.
	E., on a random line bet. secs. 26 and 35.
40.00	Set temp. 1/4 sec. cor.
80.10	Intersect N. and S. line 2 lks. S. of the cor. of secs. 25, 26, 35 and 36, heretofore described. Thence I run S. 89°59' W. on a true line bet. secs. 26 and 35. Descend rapidly over W. and N.W. slope of high ridges.
40.05	Set a gray granite stone 18x12x8 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. Cor. is on S.W. slope of ridge about 125 ft. below the sec. cor.
45.90	Foot of descent about 50 ft. below the 1/4 sec. cor., bears S.E. and N.W.; ascend on N.E. slope of spur.
46.28	Trail bears S. 20°E. and N. 20°W.
58.90	Top of spur of main ridge, about 75 ft. above foot of descent, bears S.E. and N.W.; descend rapidly over S.W. and S. slope of spur.

Subdivisions of T.38 S., R.16 W.-Continued.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

- 76.55 Trail bears S.20°W. and N.20° E.; foot of spur about 150 ft. below the top, bears N. and S.E.
- 76.65 Telegraph line from St. George to Panacca, bears S. and N.
- 76.75 Fence on E. side of B. Young's field, bears S.20°W. about 3.50 chs.; and N.20° E. about 10.00 chs. to a small reservoir at head of field, thence turns N.70° W. Enter field.
- 80.10 The cor. of secs. 26, 27, 34 and 35.
Land mostly mountainous and broken.
Soil on ridges gravelly; 3rd. rate; in the field clay and sandy loams; 2nd. and 1st. rate.
Timber, Scattering cedars and nut pine on E. 66.00 chs. Undergrowth, scattering oak and sage, and shrubbery and grasses in sufficient quantity to make good grazing.
Mountainous land on 76.55 chs.
The field contains about 10 acres, 4 or 5 acres being cultivated to corn, potatoes and other vegetables, and water and musk melons. It is supplied with water from Kane Spring wash, which is conveyed in a canal in a Southwesterly direction a distance of about 15.00 chs., to reservoir at head of farm.
September 2, 1899: I set off 70°48' 30" N. on the decl. arc; and, at 12^h M., l.m.t., observe the sun on the meridian; the resulting lat. at this cor. of secs. 26, 27, 34 and 35, is 37°28' 36" N.
-
- N.00°1' W., bet. secs. 26 and 27.
Over nearly level field land, sloping W. and N.W.
- 7.00 Fence on N.W. side of field bears N.30° E. about 4.50 chs., thence turns S.70° E.; and S.30° W. about 10.00 chs.; leave field; descend abruptly into Kane Spring wash.
- 13.00 Kane Spring wash about 40 lks. wide and 40 ft. deep, drains S.40° W.; ascend abruptly from wash.
- 16.00 Road from St. George to Modena by way of Hamblin,

76.55
3.55

Subdivisions of T.38 S.-R.16 W.-Continued.

Chains.	bears S.30° W. and N.30° E.
21.50	Kane Spring, bears E. about 10.00 chs. dist.; house about 3.00 chs. N. of main spring; corral on E. side of wash, E. of house.
30.20	Top of spur about 75 ft. high, bears E. and W.; descend.
35.40	Hollow about 50 ft. below top of spur drains S.E., along foot of spur; ascend.
40.00	Set a volcanic stone 16x10x4 ins., 11 ins. in the ground for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
40.73	Top of spur about 50 ft. high, bears E. and W.; descend.
48.43	Foot of spur bears S.E. and N.W.; ascend.
53.00	Top of spur about 50 ft. high, bears S.E. and N.W.; descend.
55.00	Road from St. George to Modena, bears S. 50° E. and N. 50° W.;
56.13	Wash about 30 lks. wide and 6 ft. deep, drains S. 50° E.; ascend from wash.
57.00	Telegraph line bears S. 50° E. and N. 50° W.
70.00	Top of knoll about 50 ft. high, bears E. and W.; descend.
73.00	N. foot of knoll, bears E. and W.; ascend.
80.00	Set a gray granite stone 18x10x8 ins., 12 ins. in the ground, for cor. of secs. 22, 23, 26 and 27, marked with 2 notches on S. and E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. This cor. is on N.W. slope of ridge about 50 ft. above the foot.
	Land mostly mountainous and broken ridges. 7.00 chs. in field nearly level.
	Soil, gravelly and stony on ridges; 4th. rate. In the field; sandy and clay loams; 2nd. and 1st. rate.
	No timber, except scattering cottonwoods and black willows and oaks along Kane Spring wash; and scattering cedars and pines on N. 30.00 chs.
	Sage, oak and service berry undergrowth, along the ridges; oak, willow and birch along Kane Spring wash. Undergrowth, grasses and shrubbery afford good grazing.
	Mountainous land on 77.00 chs.

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Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

- N.89°59' E.on a random line bet.secs.23 and 26.
- 40.00 Set temp.1/4 sec.cor.
- 80.16 Intersect N.and S.line,2 lks.S.of the cor.of secs. 23,24,25 and 26,heretofore described.
- Thence I run
- S.89°58' W.on a true line bet.secs.23 and 26.
- Descend over W.slope of ridges.
- 6.16 Wash about 25 lks.wide and 8 ft.deep,about 50 ft.below the sec.cor.,drains S.;ascend.
- 14.16 Top of ridge about 100 ft.above the wash,bears N.and S.;descend.
- 26.41 Wash about 12 lks.wide and 4 ft.deep,about 75 ft. below top of ridge,drains S.80° E.;ascend E.slope of ridge.
- 36.36 Top of ridge about 60 ft.high,bears S.40° W.and N.40° E.;descend over N.W.slope of ridge.
- 40.08 Set a granite stone 15x15x8 ins.,10 ins.in the ground, for 1/4 sec.cor.,marked 1/4.on N.face;and raised a mound of stone,2 ft.base,1 1/2 ft.high,N.of cor.
- Pits impracticable.
- 63.90 Wash about 8 lks.wide and 4 ft.deep,drains S.50° E.; ascend.
- 74.16 Top of spur about 50 ft.high,bears N.and S.;descend.
- 80.16 The cor.of secs.22,23,26 and 27,about 40 ft.below top of last spur.
- Land mountainous and broken ridges.
- Soil,gravelly and stony;4th.rate.
- Timber,scattering cedars and nut pine on E.65.00 chs.
- Undergrowth,oak in bunches,and service berry brush.
- Undergrowth,shrubby and grasses afford fair grazing.
- Mountainous land on 80.16 chs.

September 2,1899.

N.0°1' W.bet.secs.22 and 23.

Ascend over N.W.,W.and S.slopes of broken ridges.

- 4.30 Ravine about 150 lks.wide and 50 ft.deep,drains S. 10° W.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	
18.60	Ravine about 100 lks.wide and 50 ft.deep,drains S. 60° W.
28.00	Top of ridge about 200 ft.above the sec.cor.,bears S.E.and N.W.;descend.
37.00	Trail bears N.50° W.and S.50° E.
37.50	Bottom of hollow at foot of ridges about 75 ft.below top of last ridge,drains N.50° W.;ascend along S.W. slope of ridge.
40.00	Set a gray granite stone 15x12x6 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;and raised a mound of stone,2 ft.base,1 1/2 ft.high,W. of cor.;from which cor. A double cedar,14 ins.diam.,bears S.57° E.,9 lks. dist.,marked 1/4 S.23,B.T. A cedar 10 ins.diam.,bears N.31 1/2° W.,32 lks.dist, marked,1/4 S.22,B.T. Continue ascending over broken ridges with course of grainage W.and N.W.
54.00	Trail bears E.and W.
66.40	Ravine about 40 lks.wide and 15 ft.deep,drains W.
70.00	Top pf ridge about 100 ft.above the 1/4 sec.cor., bears N.E.and W.;thence along the W.slope of ridge.
78.00	Commence to descend on N.slope pf ridge,bears S.70° W.and N.70° E.
80.00	Set a blue limestone 18x10x8 ins.,12 ins.in the ground for cor.of secs.14,15,22 and 23,marked with 3 notches on S.and 3 notch on E.edges;and raised a mound of stone,2 ft.base,1 1/2 ft.high,W.of cor.Pits impracticable. Land mountainous and broken. Soil,gravelly and stony;4th.rate. Timber,scattering cedars and nut pine on S.70.00 chs. Oak and service berry undergrowth with grasses and shrubbery afford fair grazing. Mountainous land on 80.00 chs.

Subdivisions of T.38 S., R.16 W.-Continued.

- Chains. N. $89^{\circ}58'$ E. on a random line bet. secs. 14 and 23.
- 40.00 Set temp. $1/4$ sec. cor.
- 80.18 Intersect N. and S. line, 27 lks. S. of the cor. of secs. 13, 14, 23 and 24, heretofore described.
- Thence I run
- S. $89^{\circ}46'$ W. on a true line bet. secs. 14 and 23.
- Descend over top of divide and along S. slope of ridges.
- 40.09 Set a granite stone $15 \times 15 \times 4$ ins., 10 ins. in the ground for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, $1\ 1/2$ ft. high, N. of cor. Pits impracticable.
- This cor. is about 150 ft. below the sec. cor.
- 75.00 Spur of ridge bears E. and S.W.; descend over N. slope of ridge.
- 80.18 The cor. of secs. 14, 15, 22 and 23, about 100 ft. below the $1/4$ sec. cor.
- Land mountainous and broken.
- Soil, gravelly and stony; 4th. rate.
- Timber, scattering cedars and nut pine.
- Undergrowth, medium dense sage and serviceberry and scattering oak, which with shrubbery and grasses in abundance make good grazing.
- Mountainous land on 80.18 chs.
- September 4, 1899: At this sec. cor., I set off 70 4' N. on the decl. arc; and, at 11^h 59^m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ}30'$ N.
-
- 001' W. bet. secs. 14 and 15; descending over N. slope of spur of ridge.
- 64.34 Wash at foot of spur of ridge, about 75 ft. below the sec. cor., about 15 lks. wide and 5 ft. deep, drains N. 85° W.; foot of spur bears E. and W.; ascend.
- 10.00 Trail bears N. 50° W. and S. 50° E.
- 19.34 Top of spur about 50 ft. high, bears E. and W.; descend.
- 35.84 Ravine about 45 lks. wide and 10 ft. deep, drains N. 80° W.; ascend from ravine.
- 40.00 Top of spur about 50 ft. high, bears E. and W.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	Set a porphyry stone 15x14x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Descend over N.E. slope of spur and ridge.
51.64	Foot of ridge about 50 ft. below the top, bears N. 30° W. and S. 30° E.; ascend.
54.34	Top of spur or ridge about 50 ft. high, bears S. 80° W. and N. 80° E.; descend.
58.34	Foot of spur on S. side of Mountain Meadow bottom, about 50 ft. below the top of spur, bears S. 80° W. and N. 80° E.; thence over nearly level land.
60.68	Wash about 30 lks. wide and 10 ft. deep, drains N. 50° W.
66.50	Wash about 10 lks. wide and 4 ft. deep, drains N. 60° W.
70.34	Old chimney and ruins of house bears W. about 2.00 chs.
71.00	Creek about 2 lks. wide and 1 ft. deep, with water about 2 ins. deep, runs S. 70° W. about 2.00 chs.; thence N. 80° W. about 7.50 chs. to Abe Burgess' Reservoir.
79.30	Wash about 15 ft. wide and 6 ft. deep, on N. side of Mountain Meadow bottom, drains S. 30° W.; begin ascent of low ridges, bears N.E. and S.W.
80.00	Set a granite stone 20x10x8 ins., 15 ins. in the ground for cor. of secs. 10, 11, 14 and 15, marked with 4 notches on S. and 2 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. The cor. is on S.W. slope of ridge about 50 ft. above last wash. Land, partly mountainous and broken ridges, and partly nearly level land. Soil, on the ridges, gravelly; 3rd. rate; in the Mountain Meadow bottom, clay loam; 2nd. and 1st. rate. No timber. Oak, service berry and sage undergrowth, shrubbery and grasses afford good grazing. Mountainous land on 59.00 chs.
40.00	N. 89° 46' E. on a random line bet. secs. 11 and 14. Set temp. 1/4 sec. cor.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

- 80.16 Intersect N. and S. line, 22 lks. N. of the cor. of secs. 11, 12, 13 and 14, heretofore described.
 September 4, 1899: At this cor. I set off 37° 31' N. on the lat. arc; 7° 0' N. on the decl. arc; and, at 4^h p.m. l.m.t., determine a true meridian with the solar. Thence I run S. 89° 55' W. on a true line bet. secs. 11 and 14. Descend over low ridges with course of drainage North westerly.
- 4.16 Trail bears N. 10° W. and S. 10° E.
- 10.00 Wash about 10 lks. wide and 4 ft. deep, drains N.W. Ascend.
- 15.00 Trail bears N. 80° W. and S. 80° E.
- 30.00 Top of spur about 50 ft. high, bears N. and S.; descend along S.W. and S. slope of spur.
- 40.08 Set a granite stone 15x10x5 ins., 10 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
 Cor. is on S. slope of spur, about 25 ft. below the top.
- 78.56 Wash at foot of descent about 75 ft. below the 1/4 sec. cor., about 12 lks. wide and 6 ft. deep, drains S. 10° W. about 2.00 chs.; thence S. 30° W.; reservoir bet. two low ridges, about 2.00 chs. wide E. and W., and about 3.00 chs. long N. and S., bears N. about 2.00 chs. dist. from line. Now in course of construction. Ascend.
- 79.56 Trail bears N. 20° E. and S. 20° W.
- 80.16 The cor. of secs. 10, 11, 14 and 15 about 40 ft. above last wash.
 Land mountainous and broken ridges.
 Soil, clay and gravelly; 2nd. and 4th. rate.
 No timber.
 Undergrowth of sage, oak and service berry, shrubbery and grasses in abundance make fair grazing.
 Mountainous land on 80.16 chs.

September 4, 1899.

Subdivisions of T.38 S., R.16 W..-Continued.

Chains.	September 5, 1899: I set off 37°31' N. on the lat. arc; 6°45' N. on the decl. arc; and, at 9h30' a.m., 1. m.t., determine a true meridian with the solar, at the cor. of secs. 10, 11, 14 and 15, heretofore described. Thence I run N. 0° 1' W., bet. secs. 10 and 11; gradually descending over S.W. and S. slopes of low broken ridges.
1.50	Trail bears N. 20° E. and S. 30° W.
3.00	Reservoir bears E. about 1.25 ch.
14.62	Ravine about 150 lks. wide and 50 ft. deep, drains S. 70° W.; ascend from ravine more rapidly.
25.22	Top of spur or ridge about 100 ft. above the sec. cor. bears E. and W. N. 85° W. about 40.00 chs. dist. from this point is a small monument, supposed to mark the place where the Mountain Meadow Massacre of Arkansas emigrants took place, claimed by old settlers to have been committed by the Indians from Corn Creek and other parts of Northern Utah. Descend over low broken ridges, cut with small hollows and washes with course of drainage to W. and Northwesterly.
40.00	Set a gray granite stone 12x12x7 ins., 8 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
80.00	Set a yellow sandstone 15x12x8 ins., 10 ins. in the ground, for cor. of secs. 2, 3, 10 and 11, marked with 5 notches on S. and 2 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Land mountainous and broken ridges. Soil, clay and gravelly; 3rd. and 4th. rate. No timber. Undergrowth, dense sage, and scattering oak and service berry brush, with shrubbery and grasses, afford fair grazing. Mountainous land on 80.00 chs.

Subdivisions of T.38 S., R.16 W.-Continued.

- Chains. N.89°55' E.on a random line bet.secs.2 and II.
- 40.00 Set temp.1/4 sec.cor.
- 80.24 Intersect N.and S.line at the cor.of secs.1,2,11 and 12,heretofore described.
- September 5,1899:At this cor.I set off 6°42' N.on the decl.are;and,at 11h59' a.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37°32' N. Thence I run
- S.89°55' W.on a true line bet.secs.2 and II;grad-
ually descending over slightly rolling land.
- 7.86 Trail bears N.W.and S.E.
- 13.60 Wash about 25.lks.wide and 8 ft.deep,drains N.100W.; ascend.
- 18.00 E.foot of low ridges bears N.20° W.and S.20° E.; ascend.
- 20.00 Top of ridges about 50 ft.high,bears N.and S.;thence over low broken ridges,cut with small washes and hol-
lows,with general course of drainage N.and N.W.
- 40.12 Set a yellow sandstone 14x12x5 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on N.face;and raised a mound of stone,2 ft.base,1 1/2 ft.high,W. of cor. Pits impracticable.
- 80.24 The cor.of secs.2,3,10 and II.
- Land mountainous and broken ridges;and slightly rolling.
- Soil,clay loam and gravelly;2nd.and 3rd.rate.
- No timber.
- Undergrowth,medium dense sage,oak and service berry brush;with shrubbery and grasses in sufficient quantity to make good grazing.
- Mountainous land on 62.24 chs.

From the cor.of secs.2,3,10 and II,above descri-
bed,I run

N.001' W.,on a true line bet.secs.2 and 3,knowing from retracement of N.bdy.of the Tp.that a closing cor.will be necessary.

Gradually descending over low broken ridges and

Subdivisions of T.38 S., R.16 W.-Continued.

- Chains. foot hills, cut with small washes and hollows, with
with general course of drainage Northeastly.
- 40.00 Set a granite stone 20x8x6 ins., 15 ins. in the
ground, for 1/4 sec. cor., marked 1/4 on W. face; and
raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W.
of cor. Pits impracticable.
- 41.60 S. foot of knoll bears E. and W.; ascend.
- 46.68 Top of knoll about 50 ft. high, bears E. and W.; descend
over N. slope of knoll and broken ridges.
- 53.60 Ravine or wash at foot of low ridges, about 50 ft. below
top of knoll, about 60 lks. wide and 3 ft. deep, drains
N. 80° E. about 5.00 chs., thence N. 10° E. along the
foot of low ridges; ascend from ravine or wash over
low broken foot hills.
- 58.20 Road from St. George to Hamblin and Modena, bears S.
30° W. and N. 30° E.
- 61.75 Ravine about 12 lks. wide and 6 ft. deep, drains N. 80°
E. about 3.50 chs. to foot of ridges; thence along low
foot hills on general course of N. 20° E.
- 65.40 Trail bears N. 70° E. and S. 70° W.
- 71.28 Intersect N. bdy. of the Tp., 97 lks. W. of the old cor.
of secs. 2, 3, 34 and 35, heretofore described in Notes
of retracement of this bdy.
Set a gray granite stone 15x10x8 ins., 10 ins. in the
ground, for closing cor. of secs. 2 and 3, marked C.C.
on S., with 2 grooves on E. and 4 grooves on W. faces;
and raised a mound of stone, 2 ft., base, 1 1/2 ft. high,
S. of cor. Pits impracticable.
I destroy the marks on the old cor. of secs. 2, 3, 34
and 35, that pertain to secs. 2 and 3, and remark the
same for cor. of secs. 34 and 35, T. 37 S., R. 16 W., only.
Land mountainous and broken foot hills and ridges.
Soil, clay and gravelly; 3rd. and 4th. rate.
No timber.
Undergrowth, medium dense sage and scattering ser-
vice berry brush, with shrubbery and grasses in suf-
ficient quantity to make fair grazing.
Mountainous land on 71.28 chs.

September 5, 1899.

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Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

September 6, 1899: I set off 37028' N. on the lat. arc; 6°22' N. on the decl. arc; and, at 10^h a.m., 1. m.t., determine a true meridian at the cor. of secs. 3, 4, 33 and 34, on the S. bdy. of the Tp., heretofore described in Notes of Survey of this bdy.

Thence I run

N.002' W., bet. secs. 33 and 34.

Ascend over steep and rocky S. slope of high ridge.

3.50 Top of ridge about 250 ft. high, and about 100 ft. above the sec. cor., bears N.60° E. and S.60° W.; descend over N.E. slope of ridges.

39.75 Trail bears N.50° W. and S.50° E.

40.00 Set a granite stone 30x15x6 ins., 23 ins. in the ground for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Corner is on S. edge of wash about 100 ft. below top of last ridge.

40.10 Wash about 15 lks. wide and 4 ft. deep, drains S.50° E. Ascend from wash on S.W. slope of ridges.

60.25 Ravine about 150 lks. wide and 50 ft. deep, drains S. 300° W.; continue ascending on S. slope of ridge.

64.45 Hollow about 75 lks. wide and 50 ft. deep, drains S.500° W.; continue ascending on S.W. slope of ridges.

80.00 Set a volcanic stone 20x12x8 ins., 15 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, marked with 1 notch on S. and 3 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. This cor. is on S.W. slope of high ridge, about 150 ft. above the 1/4 sec. cor.

Land mountainous and broken.

Soil, gravelly and stony; 4th. rate.

No timber, except very few scattering cedars and pines.

Undergrowth, medium dense sage, oak and service berry brush; with shrubbery and grasses, making fair grazing.

Mountainous land on 80.00 chs.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	E., on a random line bet. secs. 27 and 34.
40.00	Set temp. $1/4$ sec. cor.
80.00	Intersect N. and S. line, at the cor. of secs. 26, 27, 34 and 35, heretofore described.
	September 6, 1899: At this sec. cor., I set off 60° $19^{\circ}30'$ N. on the decl. arc; and, at 11^h58^m a.m., l.m.t., observe the sun on the meridian; the resulting lat is $37^{\circ}28'36''$ N.
	Thence I run
	W., on a true line bet. secs. 27 and 34.
	Descend over nearly level field land, gradually Northwesterly.
2.26	Wire fence on W. side field, bears $S.20^{\circ}$ W. about 2.00 chs., and $N.20^{\circ}$ E.; descend rapidly into Kane Spring wash; leave field.
2.44	Trail bears N. and S.
3.90	Kane Spring wash about 30 lks. wide and 20 ft. deep, drains $S.30^{\circ}$ E.; ascend abruptly from wash.
5.65	Road from St. George to Hamblin and Modena, bears $S.30^{\circ}$ W. and $N.30^{\circ}$ E.
6.00	Top of spur about 50 ft. high, bears $S.30^{\circ}$ W. and $N.30^{\circ}$ E. Descend.
11.25	Wash about 12 lks. wide and 4 ft. deep, drains $S.10^{\circ}$ E.; ascend.
22.90	Top of almost perpendicular ledges about 40 ft. high, bears N. and S. Along these ledges are Indian or Spanish characters carved in the rocks. Continue ascending along the top of ridge.
28.00	Top of ascent of ridges about 150 ft. above the sec. cor., bears E. and W.; thence along the top of ridges.
40.00	Set a volcanic stone $16 \times 12 \times 5$ ins., 11 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
49.50	Begin descent over W. slope of ridges into ravine.
55.55	Ravine about 2.00 chs. wide and 75 ft. deep, drains $S.40^{\circ}$ W.; ascend rapidly from ravine over S.E. slope of rocky ridge.
73.00	Top of ridge about 125 ft. above the ravine, bears N.E. and descends rapidly S.W.; descend

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

- 80.00 The cor. of secs. 27, 28, 33 and 34, about 100 ft. below top of ridge.
D₃ Land mountainous and broken ridges, with E. 2.26 chs. nearly level farming land.
 Soil, on the ridges, gravelly and stony; 3rd. and 4th. rate; in the field, clay and sandy loams; 1st. and 2nd. rate.
 No timber, except very few cedars and nut pine along the central part of the line.
 Medium dense sage, scattering oak and service berry brush, shrubbery and grasses afford fair grazing.
 Mountainous land on 77.00 chs.
-
- N. 0° 2' W., bet. secs. 27 and 28.
 Ascend rapidly over rugged and rocky S.W. slope of ridge.
- 16.00 Top of ridge about 250 ft. high, bears S. 50° E. and N. 50° W.; thence along top of ridge.
- 22.50 Begin descent over N.E. slope of ridge, bears S.E. and N.W.
- 40.00 Set a gray granite stone 18x14x8 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
 This cor. is on steep N.E. slope of high ridge about 200 ft. below the top of ridge.
- 46.76 Trail bears E. and W.;
- 50.00 Wash
 at N.E. foot of ridge about 50 ft. below the 1/4 sec. cor., about 12 lks. wide and 4 ft. deep, drains S. 50° W.; ascend rapidly from wash over S.W. slope of ridge.
- 54.75 Ravine about 2.00 chs. wide and .75 ft. deep, drains S. 50° W.
- 70.00 Top of ridge about 250 ft. high, bears E. and W.; thence along the top of ridge.
- 74.50 Commence very steep descent over N.E. slope of ridge bears S.E. and N.W.
- 80.00 Set a trachyte stone 18x15x6 ins., 12 ins. in the

Subdivisions of T.38 S., R.16 W.--Continued.

Chains.	<p>ground, for cor. of secs. 21, 22, 27 and 28, marked with 2 notches on S. and 3 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.</p> <p>This cor. is on N.E. slope of high ridge about 100 feet below the top of same ridge.</p> <p>Land mountainous and very rough.</p> <p>Soil, gravelly and stony; 4th. rate.</p> <p>No timber, except very few cedars on S. 1/2 mile.</p> <p>Undergrowth, dense oak and sage and scattering service berry; shrubbery and grasses; which afford fair grazing.</p> <p>Mountainous land on 80.00 chs.</p>
40.00	E., on a random line bet. secs. 22 and 27.
80.06	Set temp. 1/4 sec. cor.
	Intersect N. and S. line, 2 lks. S. of the cor. of secs. 22, 23, 26 and 27, heretofore described.
	Thence I run
	S. 89° 59' W., on a true line bet. secs. 22 and 27.
	Descend over N.W. slope of ridge.
5.80	Ravine about 25 lks. wide and 8 ft. deep, drains S. 50°
	W. W. foot of ridge bears N.E. and S.W.; gradual descent
11.90	Wash about 10 lks. wide and 4 ft. deep, drains S.
24.10	Telegraph line from St. George to Panaca, bears S. 50° E. and N. 50° W.
28.60	Road from St. George to Hamblin and Modena, bears S. 50° E. and N. 50° W.
32.00	Foot of descent, about 75 ft. below the sec. cor., bears N.W. and S.E.; ascend over E. slope of ridges.
40.03	Set a granite stone 16x12x8 ins., 11 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. Corner is on E. slope of high ridge, about 75 ft. above foot of descent.
71.50	Top of ascent on spur of main ridge, descends rapidly N. 40° E., and ascends S. 40° W.; descend over N.W. slope of spur, and N.E. slope of main ridge.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	Spur about 75 ft. above the $\frac{1}{4}$ sec. cor.
80.06	The cor. of secs. 21, 22, 27 and 28, about 40 ft. below top of spur. Land mountainous and broken ridges. Soil, gravelly and stony; 3rd. and 4th. rate. Timber, very few cedars on central part of line. Undergrowth, medium dense sage, oak and service berry; shrubbery and grasses; which afford fair grazing. Mountainous land on 80.06 chs. September 6, 1899.
	N. $0^{\circ}2'$ W. bet. secs. 21 and 22. Descend rapidly over N.E. slope of high rocky ridge.
21.75	Trail bears N. 30° W. and S. 30° E.
22.50	Wash at foot of ridge about 150 ft. below the sec. cor. about 12 lks. wide and 4 ft. deep, drains N. 30° W., 1.00 ch., thence W.; ascend rapidly over S.W. slope of ridge.
23.50	Top of spur on W. slope of ridge about 75 ft. high, bears E. and W.; descend.
25.50	Wash at foot of spur about 50 ft. below top of same, about 15 lks. wide and 4 ft. deep, drains W.; trail follows course of wash. Ascend.
33.50	Top of ridge about 50 ft. above the wash, bears S.E. and N.W.; descend over N.E. slope of ridge.
38.10	Bottom of hollow at foot of ridge, about 50 ft. below the top, drains S. 80° E.; ascend on S.E. slope of ridge.
40.00	Set a volcanic stone 18x12x8 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raised a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. This cor. is on S.E. slope of ridge about 50 ft. above bottom of last hollow.
44.00	Top of ridge about 30 ft. above the $\frac{1}{4}$ sec. cor., bears E. and W.; descend.
50.00	Bottom of hollow about 50 ft. below top of ridge, drains W.; ascend.
55.50	Top of ridge about 50 ft. high, bears S.W. and N.E.; descend over N.W. slope of ridges.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

- 69.00 Wash at N.W. foot of ridges, about 100 ft. below top of last ridge, about 12 lks. wide and 4 ft. deep, drains S. 20° W.; foot of ridges bears N.E. and S.W.; ascend gradually.
- 69.20 Trail bears N. 20° E. and S. 20° W.
- 70.44 Wash about 40 lks. wide and 20 ft. deep, drains S. 80° W. about 1.50 ch., thence S. Enter Abe Burgess' field and pasture on N. side of wash.; thence over nearly level ground.
- 72.60 Old road bears N.E. and S.W.
At 80.00 chs. the point for cor. of secs. 15, 16, 21 and 22, falls in deep Mountain Meadow wash, on unsafe ground, at
- 79.00 Set a gray granite stone 24x12x8 ins., 18 ins. in the ground, for witness cor. to the cor. of secs. 15, 16, 21 and 22, marked W.C., 38 S. on N.E., and 16 W. on S.E. faces, with 3 notches on S. and E. edges; dug pits 18x18 XI2 ins., in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
From this witness cor., the W. end of the Mountain Meadow Monument erected over the graves of emigrants killed by the Indians, bears N. $24^{\circ}45'$ W., 3.77 chs. dist. This monument is built of small granite or cobble stone and is falling to pieces.
- 79.38 Descend over perpendicular bank of wash about 35 ft. deep, and about 1.00 ch. wide, bears S.W. and N.E.
- 80.00 The point for the cor. of secs. 15, 16, 21 and 22, in the bottom of the Mountain Meadow wash, in unsafe place to establish sec. cor., as witnessed at 79.00 chs.
A spring branch in bottom of wash, from which rises Mountain Meadow Creek, a stream of pure fresh water about 3 lks. wide and 4 ins. deep, runs in bottom of wash, S. 45° W., about 1.00 chs., thence S., and South Westerly through the Tp., and known as the Mc. Godsey creek where it crosses the S. bdy. of the Tp.
Land partly Mountainous and broken; partly nearly level field and pasture.
Soil, on the ridges gravelly and stony; 3rd. and 4th. rate; in the field and pasture; rich clay loam; 1st. rate.

Subdivisions of T.38 S., R.16 W.--Continued.

Chains.	No timber, except very few scattering cedars on S. 1/2 mile.
	Medium dense sage, oak and service berry undergrowth on the ridges and in the bottom on S. 70.00 chs.
	Mountainous land on 69.00 chs.
	N. 89° 59' E. on a random line bet. secs. 15 and 22.
40.00	Set temp. 1/4 sec. cor.
80.08	Intersect N. and S. line, 6 lks. N. of the cor. of secs. 14, 15, 22 and 23, heretofore described.
	Thence I run N. 89° 58' W., on a true line bet. secs. 15 and 22.
	Descend over steep W. slope of spur of ridge.
14.00	Wash about 50 lks. wide and 6 ft. deep, drains N. 50° W.
14.40	Telegraph line connecting St. George and Panacca, bears S. and N.; trail bears N. 50° E. and S. 50° W.
17.26	Road from St. George to Hamblin and Modena bears S. 30° E. and N. 30° W. about 1.00 ch., thence N. 50° E.; foot of ridges about 150 ft. below the sec. cor., same course as road. Descend over N. E. and N. slope of broken ridges.
34.76	Wash about 30 lks. wide and 10 ft. deep, drains N.
40.04	Set a gray granite stone 30x12x10 ins., 23 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. This cor. falls on S. side of deep wash which drains W.
	Thence along N. W. slope of ridges, ascending.
66.75	Top of ascent on spur of ridge about 50 ft. high, bears N. and S.; descend.
71.00	Trail bears S. 50° W. and N. 50° E.
72.00	Wash at N. W. foot of ridges, about 100 ft. below the top of spur, about 50 lks. wide and 30 ft. deep, drains S. 50° W.; enter Abe Burgesses' pasture and field; thence over nearly level ground.
79.08	Set a granite stone 15x8x5 ins., 10 ins. in the ground for witness cor. to the cor. of secs. 15, 16, 21 and 22, marked W. C., 38 S. on N. E., and 16 W. on S. E. faces, with

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	3 notches on S. and E. edges; dug pits 18x18x12 ins., in each sec.; 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
80.08	The cor. of secs. 15, 16, 21 and 22, in bottom of Mountain Meadow Wash.
72.00	Land mostly mountainous and broken ridges with about 8.00 chs. nearly level field land.
	Soil on the ridges, gravelly and stony; 3rd. and 4th. In the field and pasture clay loam; 1st. rate.
	No timber.
	Undergrowth, medium dense sage, service berry and scattering bunches of oaks, with shrubbery and grasses on the ridges which afford good grazing.
	Mountainous land on 72.00 chs.
	September 7, 1899: At this sec. cor. I set off 50° 57' N. on the lat. arc; and, at 11h 58m a.m., 1 p.m.t., observe the sun on the meridian; the resulting lat is 37° 30' N.
	From the cor. of secs. 15, 16, 21 and 22, which falls in the Mountain Meadow wash, I run N. 0° 2' W., bet. secs. 15 and 16.
	Ascend along bottom of wash.
50	Ascend from wash over bank about 30 ft. high, bears S. W. and N. E.; thence gradually ascend over nearly level land in pasture.
8.65	Road bears N. 20° E. and S. 20° W.
11.00	Enter low foot hills bears N. E. and S. W.
21.50	Leave foot hills bears N. E. and S. W.
35.85	Wire fence on W. side of Abe Burgesses pasture, bears N. 30° E. and S. 30° W.
38.50	Abe Burgess' dwelling house bears E. of line 42.00 chs. dist. Fenced garden of about one acre surround-house; corral, stables, granary and stackyard N. of the house and garden. A small stream of water which heads at two springs Southeasterly from the house about 40.00 chs. dist., with flow of about 6 ins. wide and 3 or 4 ins. deep, runs Northwesterly, and is used by Mr.

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Subdivisions of T.38 S., R.16 W.-Continued.

- Chains. Burgess for irrigation of garden, and for culinary and domestic purposes.
- 40.00 Set a yellow sandstone 16x12x7 ins., 11 ins. in the ground for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18 x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 2 ft. base, 1 1/2 ft. high, W. of cor. This cor. is 3.31 chs. W. of wire fence on W. side of field and pasture, which bears S. 25° W. and N. 25° E.
- 61.50 Wash 8 lks. wide and 3 ft. deep, drains S. 30° E.; begin ascent of low ridges and foot hills, bears N. E. and S. W.
- 80.00 Set a white sandstone 12x10x8 ins., 8 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, marked with 4 notches on S. and 3 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. The cor. is on the S. E. slope of low ridges or foot hills.
- Land partly mountainous and broken ridges and foot hills, and partly nearly level land.
- Soil in the valley clay loam with intermixture of gravel, and on the ridges, gravelly and stony; 1st, 2nd, and 4th. rate.
- No timber.
- Undergrowth, medium dense sage, stattering oak and service berry brush; shrubbery and grasses; which afford fair grazing.
- Mountainous land on 29.00 chs.

S. 89° 58' E. on a random line bet. secs. 10 and 15.

40.00 Set temp. 1/4 sec. cor.

80.18 Intersect N. and S. line, 2 lks. S. of the cor. of secs. 10, 11, 14 and 15, heretofore described.

Sept. 7, 1899: At this sec. cor., I set off 37° 31' N. on the lat. arc; 5° 54' N. on the decl. arc; and, at 3^h 58^m p.m., l.m.t., determine a true meridian with the solar.

Thence I run

N. 89° 59' W. on a true line bet. secs. 10 and 15.

Ascend over S. W. slope of low ridge or spur.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	
2.30	Top of ascent on spur about 40 ft. high, bears N. and S.; descend.
6.00	Foot of spur or ridge bears N.E. and S.W.; thence gradually descend over rolling valley.
14.98	Trail bears N. 10° E. and S. 10° W.
16.08	Road from St. George to Hamblin and Modena bears S. 30° E. and N. 30° W.
16.48	Wash about 15 lks. wide and 4 ft. deep, drains S. 1.00 ch., thence S.W.
19.18	Trail bears N.W. and S.E.
21.68	Telegraph line running from St. George to Pahacca, bears S. 10° E. and N. 10° W.
30.00	N.E. cor. of Abe Burgess' fence bears S. about 20.00 chs. from line.
38.78	Wash about 12 lks. wide and 4 ft. deep, drains S. 30° W.
40.09	Set a yellow sandstone 14x10x8 ins., 10 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; dug pits 18x18x12 ins., E. and W. of stone 3 ft. dist.; and raised a mound of earth, 3 $1/2$ ft. base, 1 $1/2$ ft. high, N. of cor.
42.58	Wash about 40 lks. wide and 15 ft. deep, drains S. 20° W. Small seepage and water in holes along the wash. Ascend from wash over low foot hills and broken ridges.
46.18	Trail bears S. 20° W. and N. 20° E.
60.00	N.W. cor. of Abe Burgess fence bears S. of line about 18.00 chs. dist.
63.68	Wash about 20 lks. wide and 10 ft. deep, drains S. 30° E.
73.03	Trail bears N.W. and S.E.
80.18	The cor. of secs. 9, 10, 15 and 16.
	Land partly mountainous and broken ridges and foot hills; partly nearly level and rolling land.
	Soil on the ridges rich clay, stony and gravelly; 3rd. rate. In the bottom or valley the soil is rich clay loam; 1st. and 2nd. rate.
	No timber.
	Undergrowth, medium dense sage, and scattering service berry brush, which with shrubbery and grasses afford fair grazing.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains. Mountainous land on 43.60 chs.

September 7, 1899.

September 8, 1899: I set off $37^{\circ}31'$ N. on the lat. arc; $5^{\circ}37'30''$ N. on the decl. arc; and at $8^{h}58^{m}$ a.m., 1. m.t., determine a true meridian with the solar, at the cor. of secs. 9, 10, 15 and 16, heretofore described.

Thence I run

N. $00^{\circ}2'$ W. bet. secs. 9 and 10; ascending over S.E. slope of broken ridges and foot hills.

15.35 Wash about 20 lks. wide and 10 ft. deep, drains E.

26.25 Trail bears S.E. and N.W.

26.30 Wood road bears E. and W.

40.00 Set a yellow sandstone $15 \times 15 \times 5$ ins., 10 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone, 2 ft. base, $1\ 1/2$ ft. high, W. of cor. Pits impracticable.

The cor. is on S.E. slope of main ridges, and on S.W. slope of spur running therefrom, about 100 ft. above the sec. cor.

46.11 Trail bears N. 30° W. and S. 30° E.;

47.50 Wash about 35 lks. wide and 10 ft. deep, drains S.E.

58.45 Trail bears E. and W.

62.50 Ravine about 2.00 chs. wide and 50 ft. deep, drains S. 70° E.

66.00 Enter medium dense cedars and nut pine on E. slope of high ridges.

74.00 Top of spur about 150 ft. above the $1/4$ sec. cor., on E. slope of ridge, bears E. and W.; descend.

80.00 Set a yellow sandstone $18 \times 12 \times 6$ ins., 12 ins. in the ground, for cor. of secs. 3, 4, 9 and 10, marked with 5 notches on S. and 3 notches on E. edges; from which a cedar 10 ins. diam., bears S. $76^{\circ}25'$ W. 110 lks. dist., marked

T.38 S., R.16 W., S.9, B.T.;

A cedar 14 ins. diam., bears N. $74^{\circ}53'$ E., 124 lks. dist., marked

T.38 S., R.16 W., S.3, B.T.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	<p>I also witnessed this cor. with a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor.</p> <p>Land Mountainous and broken ridges and foot hills.</p> <p>Soil, gravelly and stony; 3rd. and 4th. rate.</p> <p>Timber, medium dense cedars and pines on last 14.00 chs.</p> <p>Medium dense undergrowth of sage, scattering oak and service berry brush, with shrubbery and grasses make fair grazing.</p> <p>Mountainous land on 80.00 chs.</p>
40.00	<p>S. 89° 59' E. on a random line bet. secs. 3 and 10.</p> <p>Set temp. 1/4 sec. cor.</p>
80.20	<p>Intersect N. and S. line, 2 lks. N. of the cor. of secs. 2, 3, 10 and 11, heretofore described.</p> <p>Thence I run</p> <p>N. 89° 58' W. on a true line bet. secs. 3 and 10.</p>
II.50	<p>Descend over low ridges and foot hills, cut with small hollows and washes draining North Westerly, and join main wash.</p> <p>Main wash at foot of low ridges, about 8 lks. wide and 4 ft. deep, drains N.E. along foot of ridges. Ascend.</p>
16.21	<p>Road from St. George to Hamblin and Modena, bears S. 30° W. and N. 30° E.</p>
31.08	<p>Trail bears S. 5° E. and N. 5° W.</p>
31.13	<p>Telegraph line running from St. George to Panacca, bears S. 5° E. and N. 5° W.</p>
40.10	<p>Set a yellow sandstone 18x12x6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18x12 ins., E. and W. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.</p> <p>This cor. is on W. side of valley on E. slope adjoining the foot hills, about 75 ft. above the sec. cor.</p>
66.20	<p>Begin ascent of E. slope of high ridges, bears N. and S.</p> <p>Enter medium dense cedars and nut pine.</p>
72.20	<p>Top of spur about 125 ft. above the 1/4 sec. cor., bears S.E. and N.W.; descend.</p>
78.30	<p>Ravine about 1.00 ch. wide and 50 ft. deep, drains S. 60° E.; ascend from ravine along N.E. slope of spur.</p>

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

80.20 The cor. of secs. 3, 4, 9 and 10.

Land mountainous and broken ridges and foot hills, and sloping valley.

Soil on ridges, gravelly and stony; on slope, clay loam and gravelly; 3rd., 4th. and 2nd. rate.

Timber, medium dense cedars and nut. pine on W. 14.00 chs.

Medium dense sage undergrowth, scattering oaks and service berry brush, with shrubbery and grasses; which make fair grazing.

Mountainous land on 25.50 chs.

September 8, 1899: At this cor. of secs. 3, 4, 9 and 10, I set off $50^{\circ}34'$ N. on the decl. arc; and, at 11^h 58^m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ}32'$ N.

From the cor. of secs. 3, 4, 9 and 10, already described, I run

N., $00^{\circ}2'$ W. on a true line bet. secs. 3 and 4, knowing from previous retracement on N. bdy. of Tp. that a closing cor. will be necessary.

Descend over N.E. slope of spur.

1.00 Ravine about 1.00 ch. wide and 25 ft. deep, drains S. 80° E.; ascend.

29.50 Top of spur about 200 ft. above the sec. cor., on E. slope of high ridges, bears E. and W.; descend over N. slope of spur and E. slope of high ridges.

40.00 Set a yellow sandstone $14 \times 14 \times 6$ ins., 10 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, W. of cor. Pits impracticable.

45.40 Ravine about 70 lks. wide and 10 ft. deep, drains E.

70.50 Ravine 35 lks. wide and 8 ft. deep, drains S. 30° E.; ascend from ravine.

71.10 Intersect N. bdy. of the Tp., 71 lks., S. $89^{\circ}42'$ W. from the old cor. of secs. 3, 4, 33 and 34, heretofore described in Notes of Retracement of this bdy.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	<p>Set a yellow sandstone 15x10x5 ins., 10 ins. in the ground, for closing cor. of secs. 3 and 4, marked C.C. on S., with 3 grooves on E. and W. faces; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of cor. pits impracticable.</p> <p>I destroy the marks on the old cor. of secs. 3, 4, 33 and 34, that pertain to secs. 3, and 4, and re-mark the same for cor. of secs. 33 and 34, T. 37 S., R. 16 W., only.</p> <p>Land mountainous and broken.</p> <p>Soil, gravelly and stony; 4th. rate.</p> <p>Timber, scattering cedars and nut pine.</p> <p>Scattering oak and serviceberry undergrowth, shrubbery and grasses; which afford fair grazing.</p> <p>Mountainous land on 71.10 chs.</p> <p style="text-align: right;">September 8, 1899.</p>
	<p>September 9, 1899: I set off 37° 28' N. on the lat. arc; 5° 15' 30" N. on the decl. arc; and at 8^h 30' a.m., 1. m.t., determine a true meridian, with the solar, at the cor. of secs. 4, 5, 32 and 33 on the S. bdy. of the Tp., heretofore described in Notes of the Survey thereof.</p> <p>Thence I run</p> <p>N., 0° 3' W. bet. secs. 32 and 33.</p> <p>Ascend rapidly over S.E. slope of high broken ridges.</p>
12.00	Trail bears N. 30° W. and S. 30° E.
38.60	Ravine about 1.00 ch. wide and 50 ft. deep, drains S.W.
40.00	Set a gray granite stone 18x12x6 ins., 12 ins. in the ground for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
	Cor. on S.E. slope of high ridge about 150 ft. above the sec. cor.
41.65	Trail bears S.W. and N.E.
45.50	Top of ridge about 200 ft. high, bears N.E. and S.W.
	Descend rapidly over broken N.W. slope of high ridges.
67.20	Mc. Godsey creek at N.W. foot of high ridges, about 10 lks. wide and 2 ins. deep, drains S.W.; thence along creek bottom, gradually ascending.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

- 69.50 Recross creek about 10 lks.wide, drains S.10° E.
- 72.00 Recross same creek about 20 lks.wide, drains S.100 W.; ascend from creek over steep S.slope of high ridge
- 80.00 Set a gray sandstone 18x12x6 ins., 12 ins.in the ground, for cor.of seds. 28, 29, 32 and 33, marked with 1 notch on S.and 4 notches on E.edges; and raised a mound of stone, 2 ft.base, 1 1/2 ft.high, W.of cor. Pits impracticable.
- Cor.on S.slope of ridge about 100 ft.above the creek. Land mostly mountainous and broken with about 5.00 chs.nearly level along the creek bottom.
- Soil, gravelly and stony on the ridges with 5.00 chs. loamy and gravelly soil in creek bottom; 4th.and 2nd. rate.
- Timber, scattering cedars and nut pine on the ridges; black willows and cottonwoods along the creek.
- Undergrowth, oak and service berry brush on the ridges willows in the creek bottom; undergrowth, shrubbery and grasses afford good grazing.
- Mountainous land on 75.00 chs.
- E., on a random line bet.secs.28 and 33.
- 40.00 Set temp.1/4 sec.cor.,.
- 80.06 Intersect N.and S.line, 35 lks.S.of the cor.of secs. 27, 28, 33 and 34, heretofore described.
- Thence I run S.89°45' W.on a true line bet.secs.28 and 33.
- Descend over W.slope of ridge.
- 3.30 Bottom of hollow about 75 ft.below the sec.cor., drains S.; ascend.
- 8.00 Top of spur about 75 ft.high on S.E.slope of ridge, projects S.30° E.; descend over S.W.slope.
- 31.60 Bottom of hollow about 100 ft.below top of last spur drains.S.; ascend on N.E.slope of ridges.
- 40.03 Set a volcanic stone 15x10x4 ins., 10 ins.in the ground, for 1/4 sec.cor., marked 1/4 on N.face; and raised a mound of stone, 2 ft.base, 1 1/2 ft.high, N.

Subdivisions of T.38 S.-R.16 W.-Continued.

Chains. of cor. Pits impracticable.

50.00 Top of ledges on E. side of deep canon, bears N. 30° E and S. 30° W.; descend abruptly over steep and rocky N.W. slope.

70.46 The Mc. Godsey creek at foot of descent in canon, about 10 lks. wide with banks on either side about 15 ft. high, water about 4 ins. deep, drains S. 30° W. Creek about 250 ft. below the ledges on E. side of canon. Ascend from creek over S.E. slope of high ridges.

76.00 Ravine about 50 lks. wide and 25 ft. deep, drains S. 70° E.

80.06 The cor. of secs. 28, 29, 32 and 33, about 75 ft. above the creek.

Land mountainous and broken.

Soil, gravelly and stony; 3rd. and 4th. rate.

No timber, except black willow and cottonwoods along the creek, and scattering cedars on W. 8.00 chs.

Undergrowth of sage and service berry with shrubbery and grasses afford good grazing.

Mountainous land on 80.06 chs.

September 9, 1899: At this sec. cor., I set off $5^{\circ} 12'$ N. on the decl. arc; and, at 11^h 57^m a.m., l., m., t., observe the sun on the meridian; the resulting lat. is $37^{\circ} 28' 36''$ N.

N., $0^{\circ} 3'$ W. bet. secs. 28. and 29.

Ascend abruptly over steep S. and S.E. slopes of high broken ridges.

26.00 Top of ascent on E. slope of ridge about 200 ft. above the sec. cor., bears N.W. and S.E.; descend over N.E. slope.

40.00 Set a gray granite stone 15x8x6 ins., 10 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone, 2 ft. base, $1 1/2$ ft. high, W. of cor. Pits impracticable.

The cor. is on N.E. slope of ridge about 125 ft. below top of last ascent.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

- 43.00 Trail bears W. and S. 80° E. .
- 43.60 Ravine at foot of descent about 50 lks. wide and 25 ft. deep and about 50 ft. below the $1/4$ sec. cor., drains S. 80° E.; ascend over S.W. slope of ridges.
- 65.00 Top of ridge on E. slope of high mountain, bears S. 85° E. and N. 85° W.; thence gradual descent over top of ridge sloping to E. .
- 70.00 Begin rapid descent over N. slope of ridge.
- 80.00 Set a gray granite stone $16 \times 12 \times 5$ ins., 11 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, marked with 2 notches on S. and 4 notches on E. edges; and raised a mound of stone, 2 ft. base, $1 \frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Cor. is on N. slope of ridge about 125 ft. below top of same.
- Land mountainous and broken.
- Soil, gravelly and stony; 4th. rate.
- No timber, except scattering cedars on first 4.00 chs
- Scattering undergrowth of oak and service berry with shrubbery and grasses in abundance afford good grazing.
- Mountainous land on 80.00 chs.

- 40.00 N. $89^{\circ} 45'$ E. on a random line bet. secs. 21 and 28.
- Set temp. $1/4$ sec. cor.
- 80.04 Intersect N. and S. line, 30 lks. N. of the cor. of secs. 21, 22, 27 and 28, heretofore described.
- Thence I run S. $89^{\circ} 58'$ W. on a true line bet. secs. 21 and 28.
- Ascend along N.E. slope of high ridge.
- 4.00 Top of ascent on N.E. slope about 50 ft. above the sec. cor., bears N. and S.; descend gradually over N. slope of ridge.
- 8.00 Commence very steep descent over W. slope of ridge bears N. and S.
- 20.20 W. foot of ridge in bottom of canon, about 200 ft. below top of ridge, bears N. and S.; descend gradually.
- 21.50 Trail bears N. and S.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	
22.00	Descend over perpendicular bank about 20 ft. high into creek bottom.
22.35	Mountain Meadow or Mc.Godsey Creek, about 10 lks. wide with water about 4 ins. deep, slow current, runs S. about 1.00 ch., thence S.W.
24.40	Ascend perpendicular bank on W. side of creek bottom, bears N. and S.; ascend N.E. slope of ridges.
39.40	Trail bears N.E. and S.W.
40.02	Set a granite stone 12x10x8 ins., 8 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. <i>At imp</i> This cor. is on N.E. slope of ridge about 100 ft. above the creek. Ascend up winding ravine which drains from this point N. 80° E.
61.85	Leave ravine which drains S. 85° E., and ascend on N.E. slope of ridge.
66.15	Trail bears E. and S. 40° W.
68.00	Re-enter ravine, drains N. 45° E. about 1.00 ch., thence S. 70° E.
72.00	Leave ravine drains S. 85° E.; ascend on N. slope of ridge.
80.04	The cor. of secs. 20, 21, 28 and 29. Land mountainous and broken, with about 4.00 chs. along creek bottom nearly level. Soil, gravelly and stony; 3rd. and 4th. rate. No timber, except scattering cottonwoods and black willows in creek bottom. Medium dense oak and scattering service berry brush, shrubbery and grasses afford fair grazing. Mountainous land on 76.00 chs.
	N. 0° 3' W. bet. secs. 20 and 21. Descend on N. slope of ridge.
5.00	Ravine at foot of descent about 50 lks. wide and 10 ft. deep, drains S.E.; ascend on S. and E. slopes of high ridges.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

- 15.00 Top of ascent on E.slope of ridge about 150 ft.above the sec.cor.,bears E.and W.;descend along E.and N.E. slopes of ridges.
- 40.00 Set a granite stone 15x12x8 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;and raised a mound of stone,2 ft.base,1 1/2 ft.high,W. of cor. Pits impracticable.
- 49.00 Trail bears S.E.and N.W.
- 50.25 Ravine at foot of descent about 125 ft.below top of last ascent,about 50 lks.wide and 15 ft.deep, drains E.;ascend over S.and S.E.slopes of ridges.
- 63.00 Ravine about 50 lks.wide and 8 ft.deep,drains S.60⁰ E.;spring about 2.00 chs.W.of line drains into ravine,forming small stream about 6 ins.wide and 2 ins deep,sinks at about 3.00 chs.S.60⁰ E.of line.
- 72.00 Top of ascent on E.slope of ridge,about 100 ft. high bears E.and W.;descend over N.E.slope of ridges
- 78.25 Ravine about 50 lks.wide and 25 ft.deep,about 150 ft below top of last ascent,drains S.E.;ascend.
- 80.00 Set a trachyte stone 18x12x8 ins.,12 ins.in the ground,for cor.of secs.16,17,20 and 21,marked with 3 notches on S.and 4 notches on E.edges;and raised a mound of stone,2 ft.base,1 1/2 ft.high W.of cor. Pits impracticable.
- This cor.is on steep S.slope of ridge,about 50 ft. above the ravine.
- Land mountainous and broken.
- Soil,gravelly and stony;4th.rate.
- No timber..
- Undergrowth of sage,oak and service berry brush,with shrubbery and grasses afford good grazing.
- Mountainous land on 80.00 chs.

September 9,1899.

N.,89°58' E.on a random line bet.secs.16 and 21.

40.00 Set temp.1/4 sec.cor.

80.06 Intersect N.and S.line,7 lks.S.of the cor.of secs.

Subdivisions of T.38 S., R.16 W.-Continued.

- Chains. 15, 16, 21 and 22, in the Mountain Meadow wash, 1.00 ch. N. of the witness cor. thereof, heretofore described. Thence I run S. $89^{\circ} 55'$ W. on a true line bet. secs. 16 and 21. Ascend from wash over sloping bank about 25 ft. high.
- .50 Top of W. bank of wash, bears N. and S.; ascend over low broken ridges and foot hills.
- 9.40 Wash about 25 lks. wide and 10 ft. deep, with small stream of water about 1 link wide and 2 ins. deep, drains S. 50° E. Leave pasture.
- 10.40 Road bears N. and S.
- 15.60 Top of ridge about 75 ft. high, bears S. 50° E. and N. 50° W.; descend over W. slope of ridge.
- 25.00 Wash about 15 lks. wide and 10 ft. deep at foot of ridge about 100 ft. below the top, drains S.; ascend over S. and S. slope of ridges.
- 40.03 Set a gray granite stone 18x12x8 ins., 12 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, N. of cor. Pits impracticable. This cor. is on S. slope of ridge about 150 ft. above the sec. cor.
- 41.28 Ravine about 1.00 ch. wide and 50 ft. deep, drains S.
- 75.20 Top of ascent on S. E. slope of ridge, about 95 ft. above the $1/4$ sec. cor., bears N. and S.; descend along S. slope of ridge.
- 80.06 The cor. of secs. 16, 17, 20 and 21., about 25 ft. below top of last ascent.
- Land mountainous and broken ridges and foot hills
Soil, gravelly and stony; 3rd. and 4th. rate.
No timber.
Medium dense sage and scattering oak undergrowth, shrubbery and grasses afford fair grazing.
Mountainous land on 80.06 chs.

September 11, 1899: At this cor. of secs. 16, 17, 20 and 21, I set off $4^{\circ} 26' 30''$ N. on the decl. arc; and, at 1:57^m a.m. l.m.t., observe the sun on the meridian; the resulting lat is $37^{\circ} 30'$ N.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains. N., 0°3' W. bet. secs. 16 and 17.

Ascend rapidly over S. slope of ridge.

8.00 Top of ascent on E. slope of high ridges, about 125 ft. above the sec. cor., bears E. and W.; descend over E. slope of ridges.

18.00 Descend more rapidly on N.E. slope of ridges.

23.70 Ravine at foot of ridges, about 125 ft. below the top 50 lks. wide and 25 ft. deep, drains E.; ascend rapidly on S. slope of ridges, from the ravine.

40.00 Top of ascent on E. slope of high ridges, about 150 ft. above last ravine, bears E. and W.

Set a gray granite stone 20x14x6 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

Descend over N.E. slope of ridges.

44.90 Trail bears E. and W.

66.20 Ravine about 50 lks. wide and 25 ft. deep, drains E.

70.75 Ravine at foot of ridges about 100 ft. below the 1/4 sec. cor., about 50 lks. wide and 40 ft. deep, drains S.E. Ascend from ravine over S. slope of ridge.

80.00 Set a red sandstone 15x8x8 ins., 10 ins. in the ground for cor. of secs. 8, 9, 16 and 17, marked with 4 notches on S. and E. edges; from which cor.

A cedar 14 ins. diam., bears S. 16° E. 23 lks. dist., marked T.38 S., R.16 W., S.16, B.T.

A cedar 11 ins. diam., bears N. 110° 30' W. 33 lks. dist., marked

T.38 S., R.16 W., S.8, B.T.

I also raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

Land mountainous and broken.

Soil, stony and gravelly; 4th. rate.

Timber, scattering cedars on N. 10.00 chs.

Undergrowth, scattering serviceberry brush; medium dense oak undergrowth on 1st. 25.50 chs.

Undergrowth, shrubbery and grasses afford good grazing

Mountainous land on 80.00 chs.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	N.89°55' E.on a random line bet.secs.9 and 16.
40.00	Set temp.1/4 sec.cor.
80.04	Intersect N.and S.line,4 lks.S.of the cor.of secs.9,10,15 and 16,heretofore described.
	September 11,1899:At this sec.cor.,I set off 37° 31'30" N.on the lat.arc;4°23' N.on the decl.arc; and determine a true meridian with the solar;at 4th. P.M.1.m.t. Thence I run S.89°53' W.on a true line bet.secs.9 and 16.
	Ascend over E.slope of broken foot hills and ridges.
8.45	Wash about 12 lks.wide and 4 ft.deep,drains S.E.; begin ascent of ridges bears S.W.and N.W.
22.30	Ravine about 1.00 ch.wide and 50 ft.deep,drains S. 10° E.
23.25	Top of spur of S.E.slope of high ridge,bears N.30° W.and S.30° E.;descend over S.W.slope.
34.45	Ravine about 40 lks.wide and 25 ft.deep,drains S.10° W.;ascend.
40.02	Set a yellow sandstone 12x10x5 ins.,8 ins.in the ground,for 1/4 sec.cor.;marked 1/4 on N.face;and raised a mound of stone,2 ft.base,1 1/2 ft.high,N. of cor.;from which cor.
	A nut pine,8 ins.diam.,bears N.40° W,51 lks.dist., marked
	1/4 S.9,B.T.
	A nut pine 10 ins.diam.,bears S.30°15' E.37 lks.dist, marked
	1/4 S.16,B.T.
	This cor.is on S.W.slope.of ridge about 150 ft.above the sec.cor.
41.30	Ravine about 50 lks.wide and 30 ft.deep,drains S.20° E.
54.00	Ravine about 1.00 ch.wide and 20 ft.deep,drains S. 10° E.;trail in bottom of ravine follows course of of ravine.
61.50	Trail bears N.W.and S.E.
77.40	Ravine about 1.00 ch.wide and 200 ft.deep,drains S.
80.04	The cor.of secs.8,9,16 and 17.
	Land mountainous and broken ridges and foot hills.
	Soil,gravelly and stony;4th.rate.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	<p>Timber, scattering cedars and nut pine on last 50.00 chs.</p> <p>Dense sage, service berry and scattering oak undergrowth, shrubbery and grasses, which afford good grazing.</p> <p>Mountainous land on 80.04 chs.</p> <p>September 11, 1899.</p>
	<p>September 12, 1899: I set off 37°31' N. on the lat. arc; 40°5'30" N. on the decl. arc; and, at 10^h a.m., l.m.t., determine with the solar a true meridian, at the cor. of secs. 8, 9, 16 and 17, already described.</p> <p>Thence I run</p> <p>N. 0°3' W., bet. secs. 8 and 9; ascending rapidly over S. and S.W. slope of high ridges.</p> <p>5.00 Trail bears S.E. and N.W.</p> <p>11.30 Ravine about 1.50 chs. wide and 100 ft. deep, drains S. 10° E.</p> <p>40.00 Set a yellow sandstone 20x14x8 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.</p> <p>This cor. is on S.W. slope of ridges about 200 ft. above the sec. cor.</p> <p>41.25 Top of ascent on E. slope of high ridges, bears S. 30° E. and N. 30° W.; descend over N.E. and E. slopes of ridges.</p> <p>64.75 Ravine at foot of ridges, about 100 ft. below top of last ascent, about 50 lks. wide and 25 ft. deep, drains E.; ascend rapidly from ravine over S. slope of high ridges.</p> <p>80.00 Set a blue limestone 15x8x8 ins., 10 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, marked with 5 notches on S. and 4 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.</p> <p>Cor. is on southerly slope of high ridge about 100 ft. above last ravine.</p>

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	Land mountainous and broken. Soil, gravelly and stony; 4th. rate. Timber, scattering cedars and nut pine on Ist. 34.00 chs. Scattering oak and service berry undergrowth, with shrubbery and grasses afford fair grazing. Mountainous land on 80.00 chs.
40.00	N. 89° 53' E. on a random line bet. secs. 4 and 9. Set temp. 1/4 sec. cor.
80.08	Intersect N. and S. line, 20 lks. N. of the cor. of secs. 3, 4, 9 and 10, heretofore described. September 12, 1899: At this sec. cor., I set off 4° 3' 30" N. on the decl. arc; and, at 11 ^h 56 ^m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 32' N. Thence I run N. 89° 58' W. on a true line bet. secs. 4 and 9. Ascend rapidly on N.E. slope of high ridges.
17.00	Top of ascent about 100 ft. above the sec. cor., bears N. and S.; descend over W. slope of ridge.
21.40	Ravine at W. foot of ridge about 75 ft. below top of ascent, about 50 lks. wide and 25 ft. deep, drains S.; ascend from ravine on S.E. slope of high ridges.
40.04	Set a yellow sandstone 12x10x8 ins., 8 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face.; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. Cor. is at top of ascent on S.E. slope which bears N.W. and S.E., about 150 ft. above the sec. cor. Descend over S.W. slope of high ridges.
55.50	Ravine about 50 lks. wide and 50 ft. deep, drains S. 30° E.; ascend from ravine over E. slope of ridges.
67.00	Top of ascent, about 100 ft. above the ravine bears S. E. and N.W.; descend over S.W. slope of high ridges.
80.08	The cor. of secs. 4, 5, 8 and 9. Land mountainous and broken. Soil, gravelly and stony; 4th. rate.

Subdivisions of T.38 S., R.16 W., -Continued.

- Chains. Timber, scattering nut pine and cedars.
Medium dense undergrowth of sage, greasewood, service berry and oaks, with shrubbery and grasses which makes good grazing.
Mountainous land on 80.08 chs.
- From the cor. of secs. 4, 5, 8 and 9, above described I run
N. 0° 3' W. bet. secs. 4 and 5, on a true line, knowing from previous retracement of N. bdy. of Tp. that a closing cor. will be necessary.
Ascend rapidly over S.W. and S. slopes of high ridges.
- 17.50 Top of high ridges on rim of basin, about 150 ft. above the sec. cor., bears S. 15° E. and N. 15° W.; thence over top of high ridge, gradually ascending.
- 26.00 Commence to descend over N.W. slope of high ridges, bears N.E. and S.W.
- 40.00 Set a yellow sandstone 18x14x6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
- 42.50 Foot of descent about 75 ft. below top of ridges, bears N.W. and S.E.; ascend on S.W. slope of ridges.
- 46.00 Top of ridge about 100 ft. high, bears E. and W.; descend.
- 70.65 Intersect N. bdy. of the Tp., 67 lks. N. 89° 57' W., from the old cor. of secs. 4, 5, 32 and 33, as described in the retracement of N. bdy. of this Tp.
Set a yellow sandstone 18x10x6 ins., 12 ins. in the ground, for closing cor. of secs. 4 and 5, marked C.C. on S., with 4 grooves on E. and 2 grooves on W. faces; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of cor. Pits impracticable.
I destroy the marks on the old cor. of secs. 4, 5, 32 and 33 that pertain to secs. 4 and 5, and remark the same for cor. of secs. 32 and 33, T. 37 S., R. 16 W., only.
Land mountainous and broken.
Soil, gravelly and stony; 4th. rate.
No timber, except scattering cedars on 1st. 7.00 chs.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	<p>Scattering oak, service berry and sage undergrowth with an abundance of shrubbery and grasses afford fair grazing.</p> <p>Mountainous land on 70.65 chs.</p> <p>September 12, 1899.</p>
	<p>September 13, 1899: I set off $37^{\circ}28'$ N. on the lat. arc; $3^{\circ}43'$ N. on the decl. arc; and, at 9^h56^m a.m., l.m.t. determine a true meridian with the solar at the cor. of secs. 5, 6, 31 and 32, on the S. bdy. of the Tp. as described in the notes of Survey thereof.</p> <p>Thence I run</p> <p>N. $0^{\circ}3'$ W. bet. secs. 31 and 32.</p> <p>Ascend rapidly over S. and S.W. slopes of high ridge.</p> <p>5.00 Top of ascent on S.W. slope of ridge, projects</p> <p>S. 25° W.; descend rapidly over W. and N.W. slopes of high ridges.</p> <p>18.50 Descend over perpendicular ledges about 25 ft. high, bears N.E. and S.W.</p> <p>26.50 The Mc. Godsey creek at N.W. foot of high ridges, about 200 ft. below the top of ridges, about 3 lks. wide and 6 ins. deep, with rapid current, drains S. 30° W.; ascend from creek over S. and S.W. slopes of high ridges.</p> <p>27.25 Ravine at the mouth of rock canon about 1.00 ch. wide and 50 ft. deep, drains S. 70° E.</p> <p>40.00 Set a limestone $18 \times 14 \times 6$ ins., 12 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone, 2 ft. base, $1\ 1/2$ ft. high, W. of cor. Pits impracticable. This cor. is on S. slope of high ridges about 150 ft. above the creek.</p> <p>43.50 Top of ridges about 50 ft. above the $1/4$ sec. cor., bears N.E. and S.W.; descend over N.W. slope of ridges.</p> <p>48.20 Ravine about 50 lks. wide and 25 ft. deep, drains W.</p> <p>76.00 Ravine at foot of descent about 100 ft. below top of ridges, about 1.00 ch. wide and 75 ft. deep, drains W.; ascend rapidly from ravine.</p> <p>80.00 Set a gray granite stone $15 \times 12 \times 10$ ins., 10 ins. in the ground, for cor. of secs. 29, 30, 31 and 32, marked</p>

Subdivisions of T.38 S., R.16 W.-Continued.

Chains. with 1 notch on S. and 5 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.; from which cor.
 A cedar 12 ins. diam., bears S. 84° 30' W., 50 lks. dist. marked
 T.38 S., R.16 W., S.31, B.T.
 A cedar 10 ins. diam., bears N. 25° W., 22 lks. dist., marked
 T.38 S., R.16 W., S.30, B.T.
 A nut pine, 12 ins. diam., bears S. 36° E., 36 lks. dist., marked
 T.38 S., R.16 W., S.32, B.T.
 A nut pine, 8 ins. diam., bears N. 34° 30' E., 42 lks. dist., marked
 T.38 S., R.16 W., S.29, B.T.
 Land mountainous and broken.
 Soil, gravelly and stony; 4th. rate.
 Timber, scattering cedars and nut pine, with black willows and cottonwoods along the creek.
 Scattering oak and serviceberry undergrowth with shrubbery and grasses afford fair grazing.
 Mountainous land on 80.00 chs.

E., on a random line bet. secs. 29 and 32.
 40.00 Set temp. 1/4 sec. cor.
 79.96 Intersect N. and S. line, 15 lks. N. of the cor. of secs. 28, 29, 32 and 33, heretofore described.
 Thence I run
 N. 89° 54' W. on a true line bet. secs. 29 and 32.
 Ascend along S. and S.E. slopes of high ridges.
 7.70 Ravine about 75 lks. wide and 40 ft. deep, drains S. 300° E.; ascend from ravine.
 20.00 Top of spur on S. slope of high ridges, about 75 ft. high, bears N. and S.; descend over S.W. slope of high ridges.
 23.90 Trail bears N.W. and S.E.
 32.40 Wash at foot of descent, about 100 ft. below top of last spur, about 25 lks. wide and 6 ft. deep, drains S. 150° W.; ascend from wash.
 39.98 Set a granite stone 12x10x6 ins., 8 ins. in the ground

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	for 1/4 sec.cor., marked 1/4 on N.face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
60.00	Top of ridges about 200 ft. above the sec.cor., bears N. 20° E. and S. 20° W.; descend rapidly over N.W. slope of ridge.
74.00	Ravine about 1.00 ch. wide and 50 ft. deep, about 200 ft. below top of ridge, drains S. 50° W.; ascend rapidly from ravine over S.W. slope of ridges.
79.96	The cor. of secs. 29, 30, 31 and 32. Land mountainous and broken. Soil, gravelly and stony; 4th. rate. Timber, scattering nut pine and cedars. Scattering undergrowth of sage, oak and service berry with shrubbery and grasses afford fair grazing. Mountainous land on 79.96 chs. September 13, 1899: At this cor. of secs. 29, 30, 31 and 32, I set off 3° 40' 30" N. on the decl. arc; and, at 11 ^h 56 ^m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 28' 36" N.
	W. on a random line bet. secs. 30 and 31.
40.00	Set temp. 1/4 sec. cor.
80.70	Intersect W. bdy. of Tp. 16 lks. S. of the cor. of secs. 25, 30, 31 and 36, heretofore described in Notes of Survey of this bdy. Thence I run S., 89° 53' E. on a true line bet. secs. 30 and 31. Descend rapidly over rocky and broken E. slope of ridges.
4.00	Ravine about 100 ft. below the sec. cor., about 1.50 ch. wide and 25 ft. deep, in bottom of rock canon, drains S.E.; ascend from bottom of ravine over steep and rocky S.W. slope of ridges.
10.00	Top of ridges about 250 ft. above the ravine, bears S.E., and N.W.; thence over broken top of high ridges.
35.00	Commence to ascend high knoll, bears S.E. and N.W.
40.70	Set a gray granite stone 20x12x6 ins., 15 ins. in the

Subdivisions of T.38 S., R.16 W.-Continued.

- Chains. ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, $1\ 1/2$ ft. high, N. of cor. Pits impracticable.
The cor. is on S.E. slope of knoll about 150 ft. high. Descend.
- 45.70 E. foot of knoll about 100 ft. below the $1/4$ sec. cor., bears N. and S.; descend rapidly over S.E. slope of high ridges.
- 69.70 Ravine about 1.00 ch. wide, and 40 ft. deep, about 200 ft. below the $1/4$ sec. cor., drains S. 30° E.; ascend rapidly from ravine over rocky Westerly slope.
- 78.70 Top of ascent on E. side of ravine and hollow, about 60 ft. above the bottom of ravine, bears N. and S.; descend.
- 80.70 The cor. of secs. 29, 30, 31 and 32, about 50 ft. below top of last ascent.
Land mountainous and broken.
Soil, gravelly and stony; 4th. rate.
Timber, scattering cedars and nut pine on W. 4.00 chs and E. 14.00 chs.
Medium dense oak and service berry undergrowth, with shrubbery and grasses in sufficient quantity to make fair grazing.
Mountainous land on 80.70 chs.
- N., $0^\circ 3'$ W. bet. secs. 29 and 30.
Ascend over S.W. and S. slopes of high ridges.
- 25.00 Top of ridge about 150 ft. above the sec. cor. bears S. 85° E. and N. 85° W.; descend over N.E. slope of ridges.
- 40.00 Set a porphyry stone $14 \times 10 \times 8$ ins., 10 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone, 2 ft. base, $1\ 1/2$ ft. high, W. of cor. Pits impracticable.
This cor. is on N.E. slope about 50 ft. below top of ridge.
- 49.00 Ravine about 80 lks. wide and 50 ft. deep, drains S. 70° W.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	70° W.
72.00	Ravine about 1.50 ch. wide and 50 ft. deep, drains S.W. Ascend from ravine.
80.00	Set a gray granite stone 14x12x4 ins., 10 ins. in the ground, for cor. of secs. 19, 20, 29 and 30, marked with 2 notches on S. and 5 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Cor. on steep S. slope of ridge about 75 ft. above the ravine. Land mountainous and broken. Soil, gravelly and stony; 4th. rate. No timber, except scattering cedars and nut pine on 1st. 5.00 chs. Medium dense oak and service berry undergrowth, with shrubbery and grasses make fair grazing. Mountainous land on 80.00 chs. September 13, 1899.
40.00	S. 89° 54' E. on a random line bet. secs. 20 and 29. Set temp. 1/4 sec. cor.
79.92	Intersect N. and S. line, 10 lks. S. of the cor. of secs. 20, 21, 28 and 29, heretofore described. Thence I run N. 89° 58' W., on a true line bet. secs. 20 and 29. Ascend along steep N. slope of ridges.
20.00	Top of spur on N. slope of ridge, about 100 ft. above the sec. cor., bears S. 100° E. and N. 100° W.; descend over W. and S.W. slopes of ridges.
35.50	Foot of descent about 75 ft. below top of spur, falls rapidly S. 20° E.; ascend.
39.96	Set a gray granite stone 15x12x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
47.60	Top of high ridges on S.W. slope, bears N. and S. 100° W. Descend rapidly over W. and N.W. slopes of ridges.
71.65	Wash about 35 lks. wide and 10 ft. deep, at W. foot of high ridges about 200 ft. below the top, drains S.W.;

Subdivisions of T.38 S., R.16 W.-Continued.

- ascend steep S.W.slope.
- 74.00 Top of ascent on S.slope of high ridges, bears N.E. and S.W.; descend.
- 77.30 Ravine about 75 lks.wide and 50 ft..deep, drains S.W. Ascend from ravine.
- 79.92 The cor.of secs.19,20,29 and 30, about 75 ft.above last ravine.
Land mountainous and broken.
Soil, stony and gravelly; 4th.rate.
No timber.
Ground covered with dense growth of oak and service berry undergrowth, shrubbery and grasses, which afford good grazing.
Mountainous land on 79.92 chs.
-
- 40.00 N.89°53' W.on a random line bet.secs.19 and 30.
Set temp.1/4 sec.cor.
September 14, 1899: At this temp.1/4 sec.cor., I set off 3°18' N.on the decl.arc; and, at 11^h56^m a.m., l.m.t., observe the sun on the meridian; the resulting lat.is 37°29' N.
- 80.64 Intersect W.bdy.of the Tp.15 lks.S.of the cor.of secs.19,24,25 and 30, heretofore described in Notes of Survey of this bdy.
Thence I run
S.89°47' E.on a true line bet.secs.19 and 30.
Descend over E.and N.E.slopes of high ridges.
- 14.00 Trail bears N.30° W.and S.30° E.
- 16.24 Ravine at foot of descent about 100 ft.below the sec.cor., about 75 lks.wide and 25 ft.deep, drains S. 10° E.; ascend over S.W.slope of ridges.
- 27.64 Top of spur on S.W.slope of ridge about 75 ft.high, bears N.and S.; descend over S.E.and E.slopes of broken ridges.
- 40.64 Set a gray granite stone 15x12x6 ins., 10 ins.in the ground, for 1/4 sec.cor., marked 1/4 on N.face; and raised a mound of stone, 2 ft.base, 1 1/2 ft.high, N. of cor.; Rits impracticable. This cor.is near E.foot

Subdivisions of T.38 S., R.16 W.-Continued.

- of high ridges about 200 ft. below the sec. cor.
- 43.64 Wash at foot of descent about 50 lks. wide and 10 ft. deep, with small spring in bottom forming a creek about 1 lk. wide and 2 ins. deep, which drains with course of wash S. 10° W.; ascend from wash over S.W. and S. slopes of ridges.
- 45.64 Wash about 50 lks. wide and 6 ft. deep, drains S. 20° W.
- 58.50 Top of spur of ridge on S. slope of high mountain, bears N. and S.; descend over E. and S. slopes.
- 67.00 Ravine about 50 lks. wide and 25 ft. deep, drains S.E.
- 80.64 The cor. of secs. 19, 20, 29 and 30, about 125 ft. below top of last spur of ridge.
- Land mountainous and broken.
- Soil, stony and gravelly; 4th. rate.
- No timber.
- Ground covered with medium dense sage, oak and service berry brush, with birch and willows along the creek; wild grape vines are also found along the creek and wash. Shrubbery and grasses in abundance, which make excellent grazing for horses and cattle, and also for wild deer which graze on the ridges and water at the spring near the 1/4 sec. cor.
- Mountainous land on 80.64 chs.
-
- N., 0° 3' W. bet. secs. 19 and 20.
- Ascend rapidly over S.E. and S. slopes of high ridges.
- 37.50 Top of ridges about 200 ft. above the sec. cor., bears E. and W.; descend over N. slope of ridges.
- 40.00 Set a volcanic stone 12x10x5 ins., 8 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. The cor. in on N. slope of high ridge about 75 ft. below top of same.
- 47.30 Ravine at foot of descent about 95 ft. below top of ridge, about 50 lks. wide and 25 ft. deep, drains N.E.; ascend over S.E. slope of ridge.
- 57.00 Trail bears E. and W.
- 65.00 Top of ridge about 100 ft. above the ravine, bears S.E.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	and N.W.; descend over N.E., S.W. and W. slopes of ridges.
80.00	Set a porphyry stone 12x10x6 ins., 8 ins. in the ground, for cor. of secs. 17, 18, 19 and 20, marked with 3 notches on S. and 5 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. The cor. is on W. slope of high ridge about 150 ft. below top of last ridge. Land mountainous and broken. Soil, gravelly and stony; 4th. rate. No timber. Ground covered with undergrowth of oak and service-berry, shrubbery and grasses, which afford good grazing. Mountainous land on 80.00 chs.
40.00	S. 89° 58' E. on a random line bet. secs. 17 and 20. Set Temp. 1/4 sec. cor.
79.94	Intersect N. and S. line, 18 lks. S. of the cor. of secs. 16, 17, 20 and 21, heretofore described. September 14, 1899: At this sec. cor., I set off 37° 30' N. on the lat. arc; 30° 15' N. on the decl. arc.; and, at 5 ^h p.m., l.m.t., determine a true meridian with the solar; thence I run S. 89° 54' W., on a true line bet. secs. 17 and 20. Descend over S.W. slope of ridge.
2.50	Ravine at foot of ridge about 75 ft. below the sec. cor., about 50 lks. wide and 10 ft. deep, drains S.E.; small spring in bottom of ravine forms creek about 1 lk. wide and 1 inch deep, and runs in bottom of ravine several chains and sinks. Ascend over N.E. and N. slopes of high ridges.
33.00	Trail bears N. 80° W. and S. 80° E.
39.97	Set a gray granite stone 15x10x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. Cor. is on N. slope of ridge about 125 ft. above the ravine.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

- 40.75 Trail bears N.70° E. and S.70° W.
- 42.00 Ravine about 1.00 ch. wide and 4 ft. deep, drains N.E. Spring branch about 3.00 chs. S., forms creek about 1 lk. wide and 2 ins. deep, runs in ravine and sinks at about 5.00 chs., from head of spring. Ascend rapidly over S.E. and E. slope of high ridge.
- 75.00 Top of ridge about 75 ft. above the 1/4 sec. cor., bears N. and S.; descend over W. slope of ridge.
- 79.94 The cor. of secs. 17, 18, 19 and 20, on W. slope of ridge about 100 ft. below top of ridge. Land mountainous and broken. Soil, gravelly and stony; 4th. rate. No timber. Dense undergrowth of oak and serviceberry brush, shrubbery and grasses afford good grazing. Mountainous land on 79.94 chs.

September 14, 1899.

September 15, 1899: I set off 37°30' N. on the lat. arc; 2°57' 30" N. on the decl. arc; and, at 9^h a.m., l.m.t., determine a true meridian with the solar, at the cor. of secs. 17, 18, 19 and 20, heretofore described. Thence I run

N. 89°47' W. on a random line bet. secs. 18 and 19.

- 40.00 Set temp. 1/4 sec. cor.

- 80.54 Intersect W. bdy. of Tp., 23 lks. N. of the cor. of secs. 13, 18, 19 and 24, heretofore described in Notes of Survey of this bdy.

Thence I run

S., 89°57' E. on a true line bet. secs. 18 and 19.

Descend over E. slope of high ridge.

- 12.49 Trail bears N.E. and S.W.

- 16.64 Trail at foot of ridge about 125 ft. below the sec. cor., bears S.W. and N.E.; foot of ridges same course as trail.

- 17.15 Ravine About 1.11 ch. wide and 10 ft. deep, drains S.W.; ascend on N.W. slope of high ridge.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	Head of Hard Scrabble Springs bears S. about 15.00 chs.
38.69	Top of mountain about 300 ft. above the Ravine, bears N. and S.; thence over top of mountain, gradually ascending.
40.54	Set a gray granite stone 15x12x8 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
42.54	Descend over E. slope of mountain or ridges, bears N. and S.
59.24	Ravine at foot of descent, about 225 ft. below top of ridge, about 50 lks. wide and 25 ft. deep, drains N. 40° E. Ascend.
64.79	Top of spur on N.W. slope of ridge, about 100 ft. high bears N. 30° E. and S. 30° W.; descend over E. slope of spur and ridges.
79.54	Ravine at foot of descent, about 100 ft. below top of last spur, about 50 lks. wide and 10 ft. deep, drains N. 10° W.; ascend from ravine on W. slope of high ridge.
80.54	The cor. of secs. 17, 18, 19 and 20, about 50 ft. above the ravine. Land mountainous and broken. Soil, stony and gravelly; 4th. rate. No timber. Medium dense oak and service berry undergrowth, with shrubbery and grasses in abundance, afford fair grazing. Mountainous land on 80.54 chs.
	N., 0° 3' W. bet. secs. 17 and 18. Descend over W. and N.W. slope of ridge.
14.20	Ravine about 50 ft. below the sec. cor., 50 lks. wide and 10 ft. deep, drains N.E.; ascend over S.E. slope of ridge.
29.50	Top of ridge about 100 ft. above the ravine, bears N. E. and S.W.; descend over N. Slope of ridge.
31.25	N. foot of ridge about 60 ft. below the top, bears E. and W.; ascend.
37.50	Top of ascent, about 75 ft. above N. foot of ridge,

Subdivisions of T.38 S., R.16 W.-Continued.

Chains. bears N.E. and S.W.; descend over N.E. slope.

40.00 Set a red sandstone 18x12x6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

44.80 Ravine at foot of ridges about 50 ft. below top of last ascent, 50 lks. wide and 20 ft. deep, drains S. 40° E.; ascend over S.E. slope of ridges.

62.35 Ravine about 50 lks. wide and 25 ft. deep, drains S.W. Enter medium dense cedars, bears N.E. and S.W.

71.00 Leave cedars bears E. and W.

80.00 Set a white limestone 12x10x8 ins., 8 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, marked with 4 notches on S. and 5 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Cor. is on top of high mountain, sloping Southeasterly., about 125 ft. above the 1/4 sec. cor.

Land mountainous and broken.

Soil, gravelly and stony; 4th. rate

Timber, medium dense cedars on 8.65 chs.

Undergrowth, oak and service berry, which with grasses and shrubbery afford fair grazing.

Mountainous land on 80.00 chs.

September 15, 1899: At this cor. of secs. 7, 8, 17 and 18, I set off 20° 53' 30" N. on the decl. arc; and, at 11^h 55^m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 31' N.

N. 69° 54' E. on a random line bet. secs. 8 and 17.

40.00 Set temp. 1/4 sec. cor.

79.20 Intersect N. and S. line, 27 lks. N. of the cor. of secs. 8, 9, 16 and 17.

Thence I run

N., 69° 54' E. on a true line bet. secs. 8 and 17.

Ascend over S. slope of high ridges.

19.00 Ravine about 1.00 ch. wide and 50 ft. deep, drains S.; ascend along steep S.E. slope of high ridges.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

- 29.75 Ravine about 1.00 ch. wide and 25 ft. deep, drains S. about 50 lks., thence E.; ascend from ravine over N.E. slope of high ridges.
- 39.98 Set a yellow sandstone 15x8x5 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.; from which cor.,
A lone cedar 10 ins. diam, bears N. 51 1/2° W., 71 lks. dist., marked 1/4 S. 8, B.T.
The cor. is on N.E. slope of high ridges about 125 ft. above the sec. cor.
- 61.50 Ravine about 50 lks. wide and 30 ft. deep, drains N.E.; thence on E. slope of ridge, still ascending.
- 71.20 Trail bears N.E. and S.W.
- 75.00 Top of ascent on top of high ridge & rim of basin about 100 ft. above the 1/4 sec. cor., bears N.E. and S.W.; descend gradually over top of ridge.
- 79.96 The cor. of secs. 7, 8, 17 and 18.
Land mountainous and broken.
Soil, gravelly and stony; 4th. rate.
Timber, medium dense cedars on E. 30.00 chs.
The land is covered with oak and service berry undergrowth, shrubbery and grasses, which afford good grazing.
Mountainous land on 79.96 chs.
-
- N., 89° 57' W. on a random line bet. secs. 7 and 18.
- 40.00 Set temp. 1/4 sec. cor.
- 80.46 Intersect W. bdy. of Tp., 18 lks. N. of the cor. of secs. 7, 12, 13 and 18, heretofore described in Notes of Survey of this bdy.
Thence I run
N. 89° 55' E. on a true line bet. secs. 7 and 18.
Descend over N.W. slope of ridge.
- 10.20 Wash at foot of descent about 12 lks. wide and 5 ft. deep, and about 75 ft. below the sec. cor., drains N. 70°

Subdivisions of T.38 S., R.16 W. Continued.

Chains.	W.; ascend over steep N.W. slope of high ridge.
33.00	Top of ridge about 200 ft. high, bears N. 25° E. and S. 25° W.; descend over S.E. slope of ridge.
40.46	Set a granite stone 14x10x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. about 75 ft. below top of ridge.
54.00	Wash at foot of ridge, about 60 ft. below the 1/4 sec. cor., 12 lks. wide and 4 ft. deep, drains N.W.; ascend over N.W. slope of ridges.
60.50	Top of spur on N.W. slope of ridge about 75 ft. high, bears S. 15° W. and N. 15° E.; descend over S.E. slope.
68.50	Foot of descent, about 70 ft. below top of spur, bears N. and S.; ascend on W. slope of divide.
80.46	The cor. of secs. 7, 8, 17 and 18. Land mountainous and broken. Soil, gravelly and stony; 4th. rate. No timber. Land covered with dense oak and serviceberry undergrowth, shrubbery and grasses, which afford fair grazing. Mountainous land on 80.46 chs.
September 15, 1899.	
N. $0^{\circ}3'$ W. bet. secs. 7 and 8. Ascend over S.E. slope of high ridge.	
5.00	Top of ridge about 50 ft. above the sec. cor., bears N.W. and S.E.; descend over N.E. slope of ridges.
37.25	Trail bears N.W. and S.E.
37.35	Wash at foot of descent about 100 ft. below top of ridge, about 20 lks. wide and 6 ft. deep, drains N.W.; ascend over S.W. slope of ridge.
40.00	Set a yellow sandstone 18x12x6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Cor. on S.W. slope about 50 ft. above the wash.
45.60	Top of spur on S.W. slope about 100 ft. high, bears E.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	and W.; descend over broken ridges.
63.00	Ravine about 1.00 ch. wide and 10 ft. deep, drains S.W.;
64.00	Trail bears N.W. and S.E.
72.20	Foot of descent about 100 ft. below the $1/4$ sec. cor., and ravine about 50 lks. wide and 10 ft. deep, drains S.W.; ascend over S.E. slope of ridge.
80.00	Set a granite stone 18x12x6 ins., 12 ins. in the ground for cor. of secs. 5, 6, 7 and 8, marked with 5 notches on S. and E. edges; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, W. of cor. Pits impracticable. The cor. is on S.E. slope of high ridge, about 100 ft. above foot of last descent and ravine. Land mountainous and broken. Soil, stony and gravelly; 4th. rate. No timber. Heavy oak and service berry brush with thick shrub- bery and grasses afford good grazing. Mountainous land on 80.00 chs.
	S. $89^{\circ}54'$ E. on a random line bet. secs. 5 and 8.
40.00	Set temp. $1/4$ sec. cor.
79.92	Intersect N. and S. line, 25 lks. S. of the cor. of secs. 4, 5, 8 and 9, heretofore described. Thence \swarrow run S., $89^{\circ}55'$ W. on a true line bet. secs. 5 and 8. Descend over S. and S.W. slopes of high ridge.
10.10	Ravine at foot of descent about 75 ft. below the sec. cor., about 50 lks. wide and 10 ft. deep, drains S.; ascend over N.E. slope of ridge.
26.00	Top of ridge and divide about 100 ft. above the sec. cor., bears N.E. and S.W.; descend over N.W. slope of divide and high ridges.
37.30	On S. slope of high ridges, still descending.
39.96	Set a quartzite stone 14x12x8 ins., 10 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, N. of cor. Pits impracticable. Cor. is on S. slope of high ridge about 100 ft. below top of ridge and

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.	divide.
65.60	Ravine at foot of ridges about 75 ft. below the $1/4$ sec. cor., about 75 lks. wide and 25 ft. deep, drains S.; ascend over S.E. slope of ridge.
73.00	Top of spur on S.E. slope of ridge about 100 ft. high, bears S.W. and N.E.; descend over N.W. slope of spur.
77.10	Ravine at N.W. foot of spur, about 75 lks. wide and 25 ft. deep, drains S.W.; ascend over steep S.E. slope of high ridge.
79.92	The cor. of secs. 5, 6, 7 and 8, on S.E. slope of ridge about 100 ft. above last ravine. Land mountainous and broken. Soil, gravelly and stony; 4th. rate. Timber, scattering cedars on 1st. 10.00 chs. Scattering oak and service berry undergrowth, and dense shrubbery, with grasses, which afford good grazing. Mountainous land on 79.92 chs.
40.00	S., $89^{\circ}55'$ W. on a random line bet. secs. 6 and 7. Set temp. $1/4$ sec. cor. September 16, 1899: At 60.00 chs. W. of the cor. of secs. 5, 6, 7 and 8, on this random line, I set off $20^{\circ}31'$ N. on the decl. arc; and, at 11 ^h 55 ^m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ}32'$ N.
80.44	Intersect W. bdy. of Tp., 4 lks. S. of the cor. of secs. 1, 6, 7 and 12, heretofore described in notes of Survey of this bdy. Thence I run N., $89^{\circ}57'$ E. on a true line bet. secs. 6 and 7. Descend over S.E. and S. slopes of low ridge.
8.69	Ravine about 25 lks. wide and 10 ft. deep, drains N.
16.24	Creek about 2 lks. wide and 4 ins. deep, clear fresh water, drains N. 75° W.; heads S. 75° E. about 3.00 chs. dist.
21.44	Trail bears N. 60° W. and S. 60° E.; ascend over W. and S. W. slopes of ridges.
40.44	Set a gray granite stone 15x12x8 ins., 10 ins. in the

Subdivisions of T.38 S., R.16 W.-Continued.

- Chains. ground for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, $1\ 1/2$ ft. high, N. of cor. Pits impracticable.
- Cor. is on S.W. slope of high ridge about 100 ft. above the creek, and about 70 ft. above the sec. cor.
- 45.44 Top of spur on S.W. slope of high ridge, about 100 ft. above the $1/4$ sec. cor., bears N. and S.; descend over S.E. slope of spur and ridge.
- 60.44 Ravine about 50 lks. wide and 25 ft. deep, at foot of descent, drains S.W.; ascend over N.W. slope of ridges.
- 77.44 Top of ascent on S. slope of high ridge, about 100 ft. above the ravine, bears S. 60° W. and N. 60° E.; descend over S.E. slope of ridge.
- 80.44 The cor. of secs. 5, 6, 7 and 8, about 50 ft. below top of last ascent.
- Land mountainous and broken ridges.
- Soil, gravelly and stony with about 5.00 chs. along the creek loamy; 4th. and 2nd. rate.
- No timber, except very few scattering cottonwoods along the creek.
- The ground is covered with oak and service berry undergrowth shrubbery and grasses and along the creek with birch and willow; good grazing.
- Mountainous land on 80.44 chs.

September 16, 1899: At this cor. of secs. 5, 6, 7 and 8, already described, I set off $37^{\circ}\ 32'$ N., on the lat. arc.; $2^{\circ}\ 28'$ N. on the decl. arc; and, at 4^h p.m., 1. m.t., determine a true meridian with the solar; thence I run

N., $0^{\circ}\ 3'$ W. on a true line, bet. secs. 5 and 6, knowing from previous retracement of N. bdy. that a closing cor. will be necessary.

Ascend over S.E. slope of high ridge.

- 9.00 Top of ridge and divide, about 100 ft. above the sec. cor., bears N.E. and S.W.; descend over N.W. slope of ridges.
- 17.30 Trail bears N.E. and S.W.

Subdivisions of T.38 S., R.16 W.-Continued.

Chains.

- 27.00 On N.E.slope of ridges, still descending.
- 34.00 Trail bears E. and W.; cabin bears W. about 6.00 chs.; fenced garden of about 4x4 chs., W. of cabin; Twin springs, bears N.E. of cabin about 1.00 and 3.00 chs. respectively, drains S.W. to garden, forming creek about 1 lk. wide and 4 ins. deep, and when not in use runs from garden Northwesterly in a wash and hollow. Unable to find present claimant to these improvements.
- 44.85 Ravine about 50 lks. wide and 25 ft. deep, drains N. 15° W.
- 53.20 Ravine about 50 lks. wide and 10 ft. deep, drains N. 20° W.
- 66.90 Ravine about 50 lks. wide and 30 ft. deep, drains N.W.
- 70.70 Intersect N. bdy. of Tp., I. 11 ch. ^{S. 89° 44'} W. of the old cor. of secs. 5, 6, 31 and 32, heretofore described in Notes of Retracement of this bdy.
- Set a yellow sandstone 24x8x6 ins., 18 ins. in the ground for closing cor. of secs. 5 and 6, marked C.C. on S., with 5 grooves on E. and 1 groove on W. faces; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of corner. Pits impracticable.
- I destroy the marks on the old cor. of secs. 5, 6, 31 and 32, that pertain to secs. 5 and 6, and remark the same for cor. of secs. 31 and 32, T. 37 S., R. 16 W., only.
- Land mountainous and broken ridges.
- Soil, gravelly and stony; 4th. rate. Small tracts of about 5 acres near Twin springs, loamy and suitable for farming and gardening; 2nd. rate.
- Ground covered with oak and service berry undergrowth and shrubbery and grasses and especially suitable for grazing purposes.
- Timber, scattering cedars on N. 33.00 chs.
- Mountainous land on 70.70 chs.

September 16, 1899.

Mayhew H. Dalley
U.S. Deputy Sur.

Subdivisions of T.38 S., R.16 W.-Continued.

GENERAL DESCRIPTION.

The S.bdy. of this Tp. lies along low ridges, narrow valley and high mountain range on the E.; narrow valley, low ridges and high mountain range on the central part; and high mountain range and broken ridges cut with the Mc. Godsey creek on the W. The W.bdy. of the Tp. ascends from S.W. corner thereof over high mountain and ridges cut with deep canons or ravines on the S.; and Central parts; thence descends over high mountain ridges and knolls and low broken ridges to the N.W. cor. of Tp. The N.bdy. of the Tp., ascends from the N.W. cor. of Tp. over low broken ridges on the W. to top of high mountain range on the Central part, thence descends over E. slope and crosses narrow valley and low ridges on the E. Ascending from the N.E. cor. of the Tp., the E.bdy. line crosses low broken ridges on the N., high mountain range cut with deep canon or ravine on the Central part, thence descends over high mountain and broken ridges to the S.E. cor. of the Tp.

The interior surface is mostly made up of high mountain ranges and ridges cut with deep canons or ravines, with low ridges and narrow valley running from N. to S. through the Central part of the Tp., and a narrow valley in the S.E. part of the Tp.

The Mountain Meadow creek, known in the Southwestern part of the Tp. as the Mc. Godsey creek, cuts through the Central part of the Tp., from Northeasterly to Southwesterly, running through a deep narrow gorge or canon and forming the principal source of drainage of the interior of the Tp.

The soils of this Tp., though generally gravelly and stony, are rich, and produce undergrowth, shrubbery and grasses in abundance, which afford good grazing throughout the Tp.

There are a number of small springs distributed through the township, which, with the Mountain Meadow

Subdivisions of T.38 S.,R.16 W.-Continued.

and Mc.Godsey creek,in the Central and S.W.part, Vance's creek in the S.E.,Kane Springs in the S.Central,Burgess Creek in the Central parts,and Hamblin Creek,crossing the N.E.cor.of the Tp.,furnish good watering places for the bands of horses,herds of cattle and wild deer and antelope ranging in this and adjoining townships.

The lands in the township are mostly suitable for grazing purposes.There is a narrow strip of good farming and pasture land along the Mountain Meadow creek in secs.15,16,21 and 22,enclosed with wire fence and occupied by Mr.Abe Burgess with his family,for farming gardening and pasturage.His improvements consisting of dwelling house near center of sec.15,fenced garden,corralls,stackyard etc.with fenced fields and pastures,reservoirs and ditches, and open cuts into springs of water,are of the value of about\$2000.00.

There is a small tract of farming land in the central part of sec.36,mostly occupied by Mr.Vance and family.His improvements consists of cabins,corralls,stackyard,reservoir,ditches and about 15 acres fenced and cultivated to farm products,orchard and garden,and pasture,and are of the value of about \$1000.00.

A narrow strip of land near Kane Spring adjoining the cor.of secs.26,27,34 and 35,of about 10 acres is fenced and occupied by Mr.B.Young.His claim consists of cabin,corrall,reservoir,ditches,fencing and about 5 acres of land cultivated to vegetable and garden products and is worth about \$200.00.

Twin Spring Claim in the E.Central part of sec. 6,consists of cabin,corrall,small garden,small reservoir and cuts in side of mountain opening out springs and is of the value of about\$100.00.

This claim was unoccupied during the time of mak

Subdivisions of T.38 S.-R.16 W.-Continued.

ing the survey, and I was unable to determine the name of the present claimant.

Scattering cottonwood, black willow and ash timber grows along the Mountain Meadow and Mc. Godsey creek; and cedar and nut pine timber grows either scattering or medium dense nearly all over the township, being more dense on the high mountains and ridges in the S.E., S. Central, Central, E. Central and N. Central parts.

The main wagon road from St. George to Modena and telegraph line connecting St. George with Hebron and Panacca winds through the Central part of the Tp. from S. to N. Emigrants en route to California during the "Gold Excitement", travelled on a Southerly route through this Tp., finding good watering places and plenty of good grazing for their animals; and herein lies what is known as the "Mountain Meadows" where a Company of Arkansas emigrants was slaughtered by the ambushed Indians, in the year 1857. The Mountain Meadow Monument built of loose granite and trachyte stone near the center of the Tp., now falling to pieces, marks the burial place of the slaughtered dead. Mr. Abe Burgess has planted shade trees around the monument, and is taking particular pains to protect the remains of the dead and to beautify the surroundings.

There are no stone quarries, lime quarries or lime kilns in the township; but most of the ridges carry a good quality of trachyte, granite or sandstones, suitable for building purposes; and fragments of lime stone is scattered over the surface in various parts of the Tp, being especially noticeable on the high ridges in the N. Central part thereof.

There are no indications of coal and no mineral locations in the Tp. Along the Mc. Godsey creek in secs. 28, 32 and 33, and in Rock Canon in secs. 30 and

Subdivisions of T.38 S., R.16 W.-Continued.

31, the geological features are indicative of the presence of copper and silver ores. There are also light traces of copper or copper stains in secs. 13, 14, 23 and 24; and I hereby return as mineral lands the following subdivisions, viz:

The S. 1/2 of sec. 13; S. 1/2 of sec. 14; N. 1/2 of sec. 23; N. 1/2 of sec. 24; W. 1/2 of S. W. 1/4 of sec. 24; S. W. 1/4 of sec. 28; . . . lot No. 4 . . . of sec. 30; all of sec. 31; all of sec. 32; and N. W. 1/4 of sec. 33.

September 16, 1899.

Mayhew H. Dally
U.S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, United States Deputy Surveyor, to assist in running, measuring, and
marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

_____, Chainman.

_____, Chainman.

_____, Moundman.

_____, Moundman.

_____, Axman.

_____, Axman.

_____, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all

those parts or portions of the _____

_____ of the _____

_____ meridian, _____ of _____, which are represented

the foregoing field notes as having been surveyed by him and under his direction; and that said survey
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
other monuments established, according to the instructions furnished by the United States Surveyor
General for _____

_____, Chainman.

_____, Chainman.

_____, Moundman.

_____, Moundman.

_____, Axman.

_____, Axman.

_____, Flagman.

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dalley, United States Deputy Surveyor,
solemnly swear that, in pursuance of a contract received from Isaac B. Smith,
United States Surveyor General for Idaho, bearing date of
23rd day of January, 1899, I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Surveyor
General for Idaho, the Manual of Surveying Instructions, and the laws of
United States, surveyed all those parts or portions of The subdivisions of Township
38 South Range 16 West.

of the Salt Lake
Base and meridian, in the State of Idaho, which are represented in
foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly
swear that all the corners of said survey have been established and perpetuated in strict accordance
the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor
General for Idaho, and in the specific manner described in the field notes, and
the foregoing are the original field notes of such survey; and should any fraud be detected, I will
incur the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Mayhew H. Dalley
United States Deputy Surveyor

Subscribed by said Mayhew H. Dalley and sworn to before me }
this 31st day of May, 1899



Edward H. Henderson
U. S. Surveyor General for Idaho

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Idaho, April 17, 1900
The foregoing field notes of the survey of The subdivisions of Township
38 South Range 16 West of the Salt Lake Base and
Meridian, Idaho,

executed by Mayhew H. Dalley
under his contract No. 324, dated January 23rd, 1899, having
critically examined, and the necessary corrections and explanations made, the said field notes, and
surveys they describe, are hereby approved.

Edward H. Henderson
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in
has been correctly copied from the original notes on file in this office

United States Surveyor General

Sold May 31, 1901, *Est*

333
335

4-079.

I.

BOOK A-282

X.3.B.

FIELD NOTES

OF THE SURVEY OF THE

East Boundary

and

Reclamation of the South Boundary

Township 36 South Range 17 West

Of the *North Lake Placid* Meridian,

State of Utah,

AS SURVEYED BY

Marshall N. Valley

United States Deputy Surveyor,

Under his Contract No. *224*, dated *January 23*, 1899

Survey commenced *April 25*, 1899

Survey completed *October 7*, 1899

C-151

Lessing & Bay high 4 28.85 ✓

if " of low 2.52.50 ✓

Closing 25.22 ✓

Reclamation S. Bay low 605.57 ✓

7.62.35

NAMES AND DUTIES OF ASSISTANTS.

Max W. Andrus	Chairman
Edward J. Begbie	Chairman
Deber Valley	Minuteman
David Dix	Minuteman
Deber Valley	Coxman
David Dix	Coxman
William Macfarlane	Flagman

In preliminary affidavit we lost G. J. 388 R. 6 M.

BOOK A-282

INDEX DIAGRAM.

Township....., Range.....

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same;
we will report the true distances to all notable objects, and the true lengths of all lines that we as-
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the surv-

_____, Chain

_____, Chain.

Subscribed and sworn to before me this _____ }
day of _____, 189 }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establish-
of corners, according to the instructions given us, to the best of our skill and ability, in the surv-

_____, Mound.

_____, Mound.

Subscribed and sworn to before me this _____ }
day of _____, 189 }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of co
and other duties, according to instructions given us, to the best of our skill and ability, in the surv-

_____, Ax.

_____, Ax.

Subscribed and sworn to before me this _____ }
day of _____, 189 }



I, _____, do solemnly swear that I will well and
perform the duties of flagman according to instructions given me, to the best of my skill and ability, i
survey of _____

_____, Flag

Subscribed and sworn to before me this _____ }
day of _____, 189 }



Resurvey of the E.bdy.of T.36 S.,R.17 W.

Chains.

Resurvey commenced November 6, 1899, and executed with a W. and L. E. Gurley Light Mountain Solar Transit, for description of which see Notes of the Survey of S. bdy. of T. 42 S., R. 14 W., Book A.

I examine the adjustments of the transit and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours, with a true meridian determined by observation on Polaris, I proceed as follows:

November 6, 1899: At the cor. of Tps. 36 and 37 S., Rs. 16 and 17 W., which is a sandstone 20x20x6 ins., above ground, marked and witnessed as described by the Surveyor General, latitude $37^{\circ}37'$ N.; longitude $113^{\circ}38'$ W., I set off $37^{\circ}37'$ N. on the lat. arc; $16^{\circ}6'30''$ S. on the decl. arc; and, at 3^h47^m p.m., l.m.t., determine with the solar a true meridian and mark a point thereof, on a stone firmly set in the ground, 5.00 chs. N. of the cor.

November 6, 1899.

November 7, 1899: At 4^h 8^m a.m., l.m.t., I observe Polaris at Western Elongation, in accordance with the Manual of Instructions, and mark a point in the line thus determined, on a block of wood firmly set in the ground, 5.00 chs. N. of my station.

At 7^h30^m a.m., l.m.t., I lay off the Azimuth of Polaris $1^{\circ}33'$ to the East, and mark the True Meridian thus determined by cutting a cross (X) in the stone set November 6, on which the True Meridian falls 0.2 ins. East of the mark determined by the Solar.

November 7, 1899: At 7^h 44^m a.m., l.m.t., I set off $37^{\circ}37'$ N. on the lat. arc; $16^{\circ}18'$ S. on the decl., arc; and mark a point in the true meridian determined with the solar, by a small groove on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.3 ins. East of the True Meridian established by the

Resurvey of E.bdy. of T.36 S., R.17 W.-Continued.

Chains. Polaris observation.

The solar apparatus, by p.m. and a.m. observations defines positions for True Meridians, respectively about $0^{\circ}10'$ West and $0^{\circ}16'$ East of the Meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The Magnetic bearing of the True Meridian, at 8^h a.m., is $N.16^{\circ}27'$ W.; the angle thus determined reduced by the table, page 100, gives the Mean Mag. Decl. $16^{\circ}24'$ E.

Preliminary to commencing the subdivisions of the township, I run N. on a blank line, on the E.bdy. of sec.36; at 40.00 chs. I find the old $1/4$ sec. cor., E. 40 lks. dist.; and at 80.00 chs., the cor. of secs. 25, 30, 31 and 36, bears $S.53^{\circ}$ E. 59 lks. dist.; therefore, I continue my line N., find no part of the E.bdy. in alinement, and that many of the old corners are nearly obliterated. At 562.35 chs., intersect the 7th. Standard Parallel S., at 25.22 chs. W. of the standard cor. of Tp.35 S., Rs.16 and 17 W. I find no trace of the old closing cor. of TP.36 S., Rs.16 and 17 W.

November 7th, 1899.

As Townships 36 S., Rs.16 and 17 W., have not been subdivided, I return to the cor. of Tps.36 and 37 S., Rs.16 and 17 W., heretofore described, and resurvey the range line bet. these Tps. as follows:-

N., on resurvey line, bet. secs. 31 and 36.

Over nearly level ground; through dense sage undergrowth.

- | | |
|-------|--|
| 6.10 | Trail bears $S.50^{\circ}$ W. and $N.50^{\circ}$ E. |
| 21.75 | Trail bears $S.35^{\circ}$ E. and $N.35^{\circ}$ W. |
| 30.80 | Trail bears $S.80^{\circ}$ W. and $N.80^{\circ}$ E. |
| 40.00 | Set a granite stone $13 \times 10 \times 6$ ins., 9 ins. in the ground for $1/4$ sec. cor., marked $1/4$ on W. face; dug pits $18 \times 18 \times 12$ ins., N. and S. of stone, 3 ft. dist.; and raised a |

Resurvey of E.bdy.of T.36 S.-R.17 W.-Continued.

- Chains. mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor. The old 1/4 sec. cor., a trachyte stone 9x6x5 ins., without witness points, bears E. 40 lks. dist. I destroy all traces of this old 1/4 sec. cor.
- 57.75 Trail bears N. 25° W. and S. 25° E.
- 72.60 Trail bears E. and N. 80° W.
- 77.00 Leave dense sage undergrowth, and enter scattering sage bears N. 10° E. and S. 10° W.
- 80.00 Set a trachyte stone 15x8x5 ins., 10 ins. in the ground, for cor. of secs. 25, 30, 31 and 36, marked with 1 notch on S. and 5 notches on N. edges; dug pits 18x18x12 ins. in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Laid nearly level, gently sloping N. Soil, rich clay and sandy loams; 1st. rate. No timber. Ground covered with sage undergrowth, shrubbery and grasses, which make fair grazing. Dense sage undergrowth on 77.00 chs. The old cor. of secs. 25, 30, 31 and 36, a trachyte 13x5x3 ins., without witness points, bears S. 53° E. 59 lks. dist. I destroy all traces of this old sec. cor.
-
- N. on resurvey line bet. secs. 25 and 30. Over nearly level land; through medium dense sage undergrowth.
- 14.90 Trail bears S. E. and N. W.; enter dense sage and rabbit brush undergrowth, bears E. and W.; leave medium dense sage.
- 35.50 Trail bears E. and W.
- 40.00 Set a trachyte stone 18x10x4 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor. From this point the old 1/4 sec. cor., a trachyte 9x6x4 ins., without witness points, bears N. 71° E. 110 lks. dist. I destroy all traces of this old 1/4 sec. cor.

Resurvey of E.bdy.of T.36 S.,R.17.W.-Continued.

Chains.

- 43.75 Trail bears N.W.and S.E.
- 44.50 Road from St.George to Modena,bears S.E.and N.W.
- 54.50 Enter sand drifts bears E.and W.
- 60.50 Leave sand drifts bears S.E.and N.50° W.
- 80.00 Set a trachyte stone 15x12x5 ins.,10 ins.in the ground,for cor.of secs.19,24,25 and 30;marked with 2 notches on S.and 4 notches on N.edges;dug pits 18x18x12 ins.,in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W.of cor.
- Find no trace of the old cor.of secs.19,24,25 and 30, after diligent search.
- Land mostly level,gently sloping N.,with sand drifts crossing N.1/2 of sec.
- Soil,rich clay and sandy loams;1st.rate.
- No timber.
- Dense sage or rabbit brush undergrowth on N.65.10 chs.

N.,on resurvey line bet.secs.19 and 24.

Over nearly level land;through dense sage and rabbit brush undergrowth.

- 4.50 Trail bears E.and W.
- 19.40 Wash 1.00 ch.wide and 8 ft.deep,drains N.70° W.
- 27.00 Shoal Creek wash 50 lks.wide and 10 ft.deep,drains N.50° E.
- 40.00 Set a trachyte stone 15x10x8 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,W.of cor.
- The old 1/4 sec.cor.,a trachyte 11x6x3 ins.,without witness points;bears N.38° 10' E.,1.45 chs.dist.
- I destroy all traces of this old 1/4 sec.cor.
- 51.70 Trail bears N.35° W.,and S.35° E.
- 79.22 Trail bears S.60° E.and N.60° W.
- 80.00 Set a trachyte stone 20x10x5 ins.,15 ins.in the ground,for cor.of secs.13,18,19 and 24,marked with

Resurvey of E.bdy. of T.36 S., R.17 W.-Continued.

Chains. 3 notches on S. and N. edges; dug pits 18x18x12 ins. in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

The old cor. of secs. 13, 18, 19 and 24, which is a trachyte trachyte stone 10x5x4 ins., without witness points, bears N. 39° 45' E., 2.03 chs. dist. I destroy all traces of this old sec. cor.

Land nearly level on S. 31.00 chs.; slightly rolling land on N. 49.00 chs.

Soil, sandy and clay loams in S. 1/2 of sec., and clay gravelly soil on N. 1/2 of sec.; 2nd. and 3rd. rate.

No timber.

Undergrowth, shrubbery and grasses afford fair grazing.

Dense sage or rabbit brush undergrowth on 80.00 chs.

November 8, 1899: At this sec. cor., I set off 16° 40' S. on the decl. arc; and at 11^h 44^m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 40'

" N.

N., on resurvey line bet. secs. 13 and 18.

Over slightly rolling land; through dense sage undergrowth.

4.10 Trail bears E. and W.

20.65 Trail bears N.W. and S.E.

32.60 Trail bears N. 50° W. and S. 50° E.

40.00 Set a trachyte stone 12x12x6 ins., 8 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

The old 1/4 sec. cor., which is a trachyte stone 7x5x4 ins., without witness points, bears N. 37° 45' E. 2.25 chs. dist. I destroy all traces of this old 1/4 sec. cor.

42.15 Trail bears N.W. and S.E.

54.60 Trail bears N. 40° W. and S. 40° E.

64.58 Trail bears N. 30° W. and S. 30° E.

Resurvey of E.bdy.of T.36 S.,R.17 W.-Continued.

Chains.

- 79.45 Trail bears N.W.and S.E.
- 80.00 Set a trachyte stone 18x12x6 ins.,12 ins.in the ground,for cor.of secs.7,12,13 and 18,marked with 4 notches on S.and 2 notches on N.edges;dug pits 18x18x12 ins.,in each sec.,5 1/2 ft.dist.;and raised a mound of earth,4 ft.base,2 ft.high,W' of cor.
- From this cor.the old cor.of secs.7,12,13 and 18, which is a trachyte stone 7x7x4 ins.,with pits and mound obliterated,bears N.45°40' E.,2.27 chs.dist., I destroy all traces of this old sec.cor.
- Land slightly rolling with course of general slope to N.
- Soil,clay slightly intermixed with gravel;2nd.and 3rd.rate.
- No timber.
- Undergrowth,shrubby and grasses afford fair grazing.
- Dense sage undergrowth on 80.00 chs.
-
- N.,on resurvey line bet.secs.7 and 12.
- Over nearly level land;through dense sage undergrowth
- 8.10 Trail bears N.W.and S.E.
- 20.50 Trail bears N.W.and S.E.
- 34.12 Trail bears N.50° W.and S.30° E..
- 40.00 Set a trachyte stone 15x12x8 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, W.of cor.
- The only trace I find of the old 1/4 sec.cor.is a marked pine stake loose on the ground,which bears N. 53° E.2.44 chs.dist.from the new cor. I destroy this old stake.
- 46.75 Leave dense sage undergrowth bears E.and W.;enter scattering sage.
- 48.10 Trail bears N.75° W.and S.75° E..
- 62.60 Trail bears N.40° W.and S.40° E..
- 76.50 Trail bears N.W.and S.E.

Resurvey of E.bdy.of T.36 S.,R.17 W.-Continued.

Chains.

80.00 Set a trachyte stone 18x14x8 ins., 12 ins. in the ground, for cor. of secs. 1, 6, 7 and 12, marked with 5 notches on S. and 1 notch on N. edges; dug pits 18x18x12 ins. in each sec. 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

From this cor. the old cor. - a trachyte stone 10x7x4 ins., with no traces of pits and mound - bears N. 65° 40' E., 2.14 chs. dist. I destroy all traces of this old cor.

Lime Canfield's cabins bears N. 16° W., about 70.00 chs. dist. from the new cor.

Land nearly level, gently sloping to N.

Soil, clay slightly intermixed with gravel; 2nd. and 3rd. rate.

No timber.

Undergrowth, shrubbery and grasses afford fair grazing.

Dense sage undergrowth on 46.75 chs.

November 8, 1899: I set off 37° 42' N. on the lat. arc; 16° 42' S. on the decl. arc; and, at 2^h 44^m p.m., l.m. t., determine a true meridian with the solar, at the cor. of secs. 1, 6, 7 and 12, already described.

Thence I run

N., on resurvey line bet. secs. 1 and 6; slightly descending over nearly level ground.

2.53 Trail bears N. 80° W. and S. 80° E.

6.60 Road from St. George to Modena, bears S. 25° E. and N. 25° W.

40.00 Set a trachyte stone 10x10x6 ins., 7 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

From this cor. the old 1/4 sec. cor., a trachyte stone with pits and mound obliterated, bears N. 68° 15' E. 2.53 chs. dist. I destroy all traces of the old cor.

Resurvey of E.bdy.of T.36 S.,R.17 W.-Continued.

Chains. Lime Canfield's cabin, with stable N. of cabin bears N. $29^{\circ}10'$ W., about 30.00 chs. dist.

48.10 Trail bears N. 25° W. and S. 25° E.

76.10 Trail bears N. 30° W. and S. 30° E.

90.63 Trail bears N. 50° W. and S. 50° E.

120.19 Trail bears N.W. and S.E.

162.35 Intersect the 7th. Standards Parallel South 25.22 chs. W. of the Standard cor. of Tp. 35 S., R. 16 and 17 W., which is a granite stone 12x8x6 ins. above ground, marked and witnessed as described by the Surveyor General.

Set a trachyte stone 15x9x5 ins., 10 ins. in the ground, for closing cor. of Tp. 36 S., Rs. 16 and 17 W.; marked C.C. 36 S., on S., 16 W. on E., and 17 W. on W. faces, with 6 grooves on S., E. and W. faces; dug pits 30x24x12 ins. crosswise on each line E. and W., 4 ft., and S. of stone, 8 ft. dist.; and raised a mound of earth, 5 ft. base, 2 $1/2$ ft. high, S. of cor.

Find no trace of the old closing Tp. cor., after diligent search.

Land nearly level, gently sloping N.

Soil, rich sand and clay loams slightly intermixed with gravel; 1st. and 2nd. rate.

No timber.

Undergrowth, shrubbery and grasses in sufficient quantity to make fair grazing.

November 8, 1899.

GENERAL DESCRIPTION.

For General Description see Notes of subdivision of this Township.

November 8th, 1899.

Mayhew H. Gall
U.S. Deputy Surveyor.

Retracement of S.bdy.of T.36 S., R.17 W.

Chains.

Retracement commenced November 9, 1899, and executed with a W. and L. E. Gurley Light Mountain Solar Transit, for description of which see Notes of the Survey of S.bdy. of T.42 S., R.14 W., Book A.

For complete test of solar apparatus see Notes of Resurvey of the E.bdy. of this Tp.

Having heretofore retraced the E.bdy. of the Tp. and found the same irregular in bearing and defective in measurements, I deem it advisable to test the courses and lengths of lines on the S.bdy. thereof before commencing the survey of the subdivisions; therefore I proceed as follows:-

November 9, 1899: I set off $37^{\circ}37'$ N. on the lat. arc; $16^{\circ}53'$ S. on the decl. arc; and, at $7^{\text{h}}44'$ a.m., l.m.t., determining a true meridian with the solar, at the cor. of Tps. 36 and 37 S., Rs. 16 and 17 W., heretofore described in Notes of Resurvey of the E.bdy. of this Tp.

Thence I run

W., on the S.bdy. of the Tp., retracing the line bet. secs. 1 and 36.

Over nearly level ground; through dense sage undergrowth.

12.70 Trail bears N.E. and S.W.

23.95 Shoal Creek wash 100 lks. wide and 6 ft. deep, drains N. 25° W.; begin ascent of low foot hills; leave level ground.

31.50 Leave dense sage undergrowth bears N. and S.; enter medium dense sage.

36.60 Trail bears N. and S.

40.41 Cedar post about 4 ft. above ground, 6 ins. diam., bears N. 20 lks. dist. - post marked IRON CO., on N. and W. CO., on S.

40.45 Fall 20 lks. S. of the old $1/4$ sec. cor., which is a trachyte stone 15x8x5 ins. above ground, marked and witnessed as described by the Surveyor General.

49.64 Course of line, therefore, is N. $89^{\circ}43'$ W. Road from Enterprise to Modena, bears S. 50° W. and N. 50° E.

Retracement of S.bdy.of T.36 S.,R.17 W.-Continued.

Chains.	
50.93	Trail bears N.and S.
65.55	Wash 16 lks.wide and 4 ft.deep drains S.300° E.
68.56	Trail bears N.100° W.and S.100° E.
69.68	Wood ^{road} running from Enterprise to the cedars bears S.200° E.and N.200° W.
71.00	Leave foot hills and begin ascent of ridges on W. side of valley,about 100 ft.above the Tp.cor.,bears S.150° E.and N.150° W.
81.13	Fall 56 lks.N.of the old cor.of secs.1,2,35 and 36, which is a trachyte stone 10x6x5 ins.above ground, marked and witnessed as described by the Surveyor General.On N.E.slope about 50 ft.above foot of ridges The course of this line is therefore,S.89°36' W., bet.the Tp.and sec.cor.;and the course on last 1/2 mile is S.88°55' W. ;and distance 40.67 chs. Land partly level;and partly foot hills and mountainous. Soil in the valley rich loam;1st.rate.On the ridges and foot hills the soil is gravelly;3rd.rate. No timber,except very few cedars on the ridges. Mountainous land or land covered with dense undergrowth on 41.58 chs.
	From the cor.of secs.1,2,35 and 36,above described I run W.,retracing line bet.secs.2 and 35. Ascend over N.E.slope of ridges.
20.50	Top of ridge about 100 ft.above the sec.cor.,bears N.E.and S.W.;descend over N.W.slope.
28.23	Hollow at N.W.foot of ridges about 50 ft.below top, drains N.;ascend.
33.43	Top of ridge 75 ft.high bears N.and S. ;descend over N.W.slope of ridge.
35.73	Foot of descent about 75 ft.below top of ridge,falls to N.E.,and rises S.W.;ascend over E.and N.E.slope
40.82	Fall 22 lks.S.of the old 1/4 sec.cor.,which is a granite stone 16x16x5 ins.above ground,marked and

Retracement of S.bdy. of T.36 S., R.17 W.-Continued.

Chains.	witnessed as described by the Surveyor General.
43.50	Course of this line is, therefore, N.89°41' W. Top of ridge about 100 ft. high, bears N.E. and S.W.; descend over N.W. slope.
58.00	Hollow at foot of descent about 100 ft. below the top, drains N.E.; ascend over N.E. slope of ridge.
80.52	Fall 56 lks. S. of the old cor. of secs. 2, 3, 34 and 35, which is a trachyte stone 10x6x6 ins. above ground, marked and witnessed as described by the Surveyor General.
	The course of this line is therefore, N.89° 36' W. bet. the sec. corners; and the course on last 1/2 mile is N.89°31' W.; and distance 39.70 chs. Land mountainous and broken ridges. Soil, gravelly and stony; 3rd. and 4th. rate. No timber, except very few cedars. Medium dense sage and service berry undergrowth, with shrubbery and grasses afford good grazing. Mountainous land on 80.52 chs..
	From the cor. of secs. 2, 3, 34 and 35, above described I run W., retracing line bet. secs. 3 and 34. Ascend over N.E. and E. slopes of ridges.
25.80	Top of ridge about 150 ft. above the sec. cor., bears N. and S.; descend over N.W. slope of ridges.
39.70	Fall 32 lks. N. of the old 1/4 sec. cor., which is a granite stone 10x6x5 ins. above ground, marked and witnessed as described by the Surveyor General.
50.80	Course of line is therefore, S.89°32' W. Foot of descent about 100 ft. below top of last ridge, slopes S.W.; ascend on S.E. slope of ridges. Trail bears N. and S.
72.80	Top of ascent on ridge about 150 ft. high, bears N. 10° E. and S. 10° W.; descend over N.W. slope of ridges.
80.52	Fall 31 lks. N. of the old cor. of secs. 3, 4, 33 and 34, which is a granite stone 12x8x6 ins. above ground, marked and witnessed as described by the Surveyor General.
	The course of this line is therefore, S.89°47' W., bet. the sec. corners.; and N.89°59' W. on last 1/2 mile.

Retracement of S.bdy.of T.36 S.,R.17 W.-Continued.

Chains.	Land mountainous and broken ridges. Soil, gravelly and stony; 3rd. and 4th. rate. Timber, scattering cedar and nut pine. Medium dense sage and service berry undergrowth with and abundance of grasses and shrubbery afford good grazing. Mountainous land on 80.52 chs. November 9, 1899: At this cor. of secs. 3, 4, 33 and 34, I set off $16^{\circ}57'30''$ S. on the decl. arc; and, at 11^h44^m a.m., l.m.t., observe the sun on the meridian; the re- sulting lat is $37^{\circ}37'$ N.
	From the old cor. of secs. 3, 4, 33 and 34, above de- scribed I run W., retracing line bet. secs. 4 and 33. Descend over N.W. and W. slopes of ridges: 15.13 Ravine at W. foot of ridges, about 125 ft. below the sec. cor., about 20 lks. wide and 10 ft. deep, drains, S.W.; ascend over S.E. slope of ridges. 23.50 Top of ascent on S.W. slope of ridge, about 50 ft. above the ravine, bears N.W. and S.E.; descend over S.W. slope. 29.63 W. foot of ridges about 100 ft. below top of last as- cent, bears $N.15^{\circ}$ W. and $S.15^{\circ}$ E. 30.47 Trail bears $N.20^{\circ}$ W. and $S.20^{\circ}$ E. 30.76 Road from Enterprise to Modena and wood hills, bears $S.10^{\circ}$ E. and $N.10^{\circ}$ W. 31.93 Wash at foot of descent about 8 lks. wide and 4 ft. deep, drains $S.15^{\circ}$ E.; ascend over E. and N.E. slope of high ridges. 33.73 Trail bears N. and S. 40.20 Fall 46 lks. S. of the old $1/4$ sec. cor., which is a gra- ite stone $10 \times 10 \times 6$ ins. above ground, marked and wit- nessed as described by the Surveyor General. The cou- of this line is, therefore, $N.89^{\circ}21'$ W. 63.20 Top of ascent on N.E. slope of ridge about 100 ft. above the wash, bears N.E. and S.W.; thence along the N. slope of high ridge over broken spurs, with gener- course of drainage to N. and N.W. 80.50 Fall 57 lks. S. of the old cor. of secs. 4, 5, 32 and 33,

Retracement of S.bdy.of T.36 S.,R.17 W.-Continued.

Chains. which is a granite stone, 8x8x5 ins. above ground, marked and witnessed as described by the Surveyor General.

The course of this line is, therefore, N. 89° 36' W. bet. the sec. corners; and N. 89° 51' W. on the last 1/2 mile; and the distance 40.30 chs.

Land mountainous and broken.

Soil, gravelly and stony; 3rd. and 4th. rate.

Timber, scattering cedars and nut pine.

Sage and service berry undergrowth, shrubbery and grasses in sufficient quantity to make fair grazing. Mountainous land on 80.50 chs.

From the cor. of secs. 4, 5, 32 and 33, already described, I run

W., retracing line bet. secs 5 and 32.

Over N. slope of high ridge over spurs and hollows which drain N. and N.W.

10.75 Commence descent over N.W. slope of ridge, bears N.E. and S.W.

16.73 Ravine about 50 lks. wide and 10 ft. deep, drains N. 45° E.

24.75 Ravine about 75 lks. wide and 50 ft. deep, drains N. 30° E.; ascend from ravine over E. slope of ridge.

32.75 Top of ascent about 100 ft. above the ravine, bears N. and S.; thence descend gradually over N. slope of high ridge.

40.82 Fall 23 lks. N. of the old 1/4 sec. cor., which is a flint stone 12x10x5 ins. above ground, marked and witnessed as described by the Surveyor General. The course of this line is, therefore, S. 89° 41' W.

68.41 Trail bears N. 50° W. and S. 50° E.

81.83 Fall 39 lks. S. of the old cor. of secs. 5, 6, 31 and 32, which is a flint stone 12x8x5 ins. above ground, marked and witnessed as described by the Surveyor General.

The course of this line is therefore, N. 89° 43' W. bet. the sec. corners; and course N. 89° 08' W. on last 1/2 mi. and the distance 41.01 chains. Land mountainous and broken.

Soil, gravelly and stony; 3rd. and 4th. rate.

Retracement of S.bdy.of T.36 S.,R.17 W.-Continued.

Chains.	<p>Timber, scattering cedars and nut pine. Sage and service berry undergrowth and shrubbery and grasses in abundance, which afford good grazing. Mountainous land on 81.83 chs.</p>
	<p>From the old cor. of secs. 5, 6, 31 and 32, heretofore described, I run W., retracing line bet. secs. 6 and 31. Gradually ascend over N. and N.E. slopes of high ridge.</p>
34.60	Hollow on N. slope of ridge about 50 lks. wide and 25 ft. deep, drains N.
40.66	Fall 16 lks. S. of the old 1/4 sec. cor., which is a granite stone 12x6x5 ins. above ground, marked and witnessed as described by the Surveyor General. The course of line is, therefore, N. 89° 46' W.
60.50	Top of mountain about 250 ft. high, bears S. 50° E. and N. 50° W.; descend over S.W. slope of mountain and ridges.
81.07	<p>Intersect W. bdy. of the Tp., at the old cor. of Tps. 36 and 37 S., Rs. 17 and 18 W., which is a flint stone 12x12x7 ins. above ground, marked and witnessed as described by the Surveyor General. The cor. is on S.W. slope of ridge about 100 ft. below top of the mountain.</p> <p>The course of this line is, therefore, due West bet. the sec. corners; and course, S. 89° 46' W. on last 1/2 mile, and the distance 40.41 chs.</p> <p>Land mountainous and broken. Soil, gravelly and stony; 3rd. and 4th. rate. Timber, scattering cedars and nut pine. Medium dense sage and serviceberry and oak undergrowth, with shrubbery and grasses afford fair grazing. Mountainous land on 81.07 chs.</p>

November 9, 1899.

Retracement of S.bdy.of T.36 S.,R.17 W.-Continued.

GENERAL DESCRIPTION.

For General Description see Notes of the Survey of Subdivisions of this Tp.

November 9th, 1899.

Mayhew H. Galley
U.S. Deputy Surveyor.

BOUNDARIES OF T.36 SOUTH, R.17 W.

Latitudes, Departures and Closing Errors.

Line Designated.	True Bearing.	Distance.	Latitudes.		Departures.	
			N.	S.	E.	W.
		Chs.	Chs.	Chs.	Chs.	Chs.
S.bdy.T.36 S.R.17 W.						
S.bdy.sec.36.	S.89°36'W.	81.13.		.56.		81.13.
S.bdy.sec.35.	N.89°36'W.	80.52.	.56.			80.52.
S.bdy.sec.34.	S.89°47'W.	80.52.		.31.		80.52.
S.bdy.sec.33.	N.89°36'W.	80.50.	.57.			80.50.
S.bdy.sec.32.	N.89°43'W.	81.83.	.39.			81.83.
S.bdy.sec.31.	West	81.07.				81.07.
W.bdy.T.36 S.,R.17 W.	North.	561.67.	561.67.			
N.bdy.T.36 S.,R.17 W.						
7th.Standard Paral-						
lel South.	East.	486.28			486.28.	
480.00+31.50+25.22 chs.						
E.bdy.T.36 S.,R.17 W.	South.	562.35		562.35.		
Convergency-					.56.	
Totals-			563.19.	563.22.	486.84.	485.57.
				563.19.	485.57.	
Error in Latitude				.03.		
Error in Departure					1.27	

November 9th, 1899.

Mayhew H. Galley
U.S. Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by

....., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of

..... showing the respective capacities in which they acted

....., Chainman.

....., Chainman.

....., Moundman.

....., Moundman.

....., Axman.

....., Axman.

....., Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted

....., United States Deputy Surveyor, in surveying all those parts or portions of the

..... of the

..... meridian, of, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for

....., Chainman.

....., Chainman.

....., Moundman.

....., Moundman.

....., Axman.

....., Axman.

....., Flagman.

Subscribed and sworn to before me this

day of, 189 }



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BOOK A-282

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Dally, United States Deputy Surveyor
solemnly swear that, in pursuance of a contract received from Jacob B. Blain
United States Surveyor General for Idaho, bearing date
23^d day of January, 1899, I have well, faithfully, and truly, in
proper person, and in strict conformity with the instructions furnished by the United States S.
General for Idaho, the Manual of Surveying Instructions, and the laws
United States, surveyed all those parts or portions of the East & South boundaries
of Township 36 South Range 17 West

Base and meridian, in the State of Idaho, which are represented
foregoing field notes as having been surveyed by me, and under my direction; and I do further
swear that all the corners of said survey have been established and perpetuated in strict accordance
the Manual of Surveying Instructions, and the special written instructions of the United States S.
General for Idaho, and in the specific manner described in the field notes,
the foregoing are the original field notes of such survey; and should any fraud be detected, I will
the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Mayhew H. Dally
United States Deputy Surveyor

Subscribed by said Mayhew H. Dally and sworn to before me
this 3rd day of May, 1899



Edward Henders
U. S. Surveyor General for Idaho

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 17, 1900
The foregoing field notes of the survey of the East boundary
reclamation of the South boundary of Township 36
South Range 17 West of the Salt Lake Base and
Meridian (Idaho)

executed by Mayhew H. Dally
under his contract No. 224, dated January 23, 1899, has
critically examined, and the necessary corrections and explanations made, the said field notes,
reclamation surveys, they describe, are hereby approved.

Edward Henders
United States Surveyor

I certify that the foregoing transcript of the field notes of the above-described surveys in
has been correctly copied from the original notes on file in this

United States Surveyor

Filed May 31, 1901
E.M.B.

357
357

4-679.

J.

BOOK A-282

23.13.

FIELD NOTES

OF THE SURVEY OF THE

Meddisonian

of Township 36 South Range 17 West

Of the *North State Base and* Meridian,

State of Idaho,

AS SURVEYED BY

Maxwell D. Dillig, United States Deputy Surveyor,

Under his Contract No. *924*, dated *January 23*, 1899

Survey commenced *September 10th*, 1899

Survey completed *November 25th*, 1899

6-101

Acres 56-53.87 ✓
Less 8.65 ✓
closing 46.88 ✓
6539.72

NAMES AND DUTIES OF ASSISTANTS.

Max H. Mollney	Chairman
Edward J. Stegler	Chairman
Oliver Valley	Member
David Dix	Member
Oliver Valley	Member
William Macfarlane	Flagman

To preliminary affidavit see book A-282 R. 1/2

BOOK A-282

INDEX DIAGRAM.

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that
we will report the true distances to all notable objects, and the true lengths of all lines that we assist
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey;

_____, Chain.

_____, Chain.

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establish-
ment of corners, according to the instructions given us, to the best of our skill and ability, in the .

_____, Moundman.

_____, Moundman.

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



WE, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of
and other duties, according to instructions given us, to the best of our skill and ability, in the survey.

_____, Axman.

_____, Axman.

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



I, _____, do solemnly swear that I will well and
perform the duties of flagman according to instructions given me, to the best of my skill and ability,
survey of _____

_____, Flagman.

Subscribed and sworn to before me this _____ }
day of _____, 189 _____ }



Subdivisions of T.36 S., R.17 W.

Chains.

Survey commenced November 10, 1899, and executed with a W. and L. E. Gurley Light Mountain Solar Transit for description of which see Notes of the Survey of S. bdy. of T. 42 S., R. 14 W., Book A.

For complete test of solar apparatus see Notes of Resurvey of the E. bdy. of this Tp., *Book I.*

Having previously retraced the S. bdy. of this Tp., and finding the same irregular in bearing and defective in measurements, I establish Sectional Correction Line as follows:

November 10, 1899: I set off $37^{\circ}38'$ N. on the lat. arc; $17^{\circ}11'$ S. on the decl. arc; and, at $8^h44'$ a. m., l. m. t., determine a true meridian with the solar, at the cor. of secs. 25, 30, 31 and 36, on the E. bdy. of the Tp., heretofore described in Notes of Resurvey thereof.

Thence I run

W. bet. secs. 25 and 36, on Sectional Correction Line. . . .
Over nearly level land; through scattering sage brush.

- 11.18 Trail bears N. and S.
- 11.28 Enter dense sage undergrowth bears $N.20^{\circ} E.$ and $S.20^{\circ} W.$; leave scattering sage.
- 20.32 Shoal Creek wash 1.50 ch. wide and 5 ft. deep, drains $N.15^{\circ} E.$
- 25.08 Begin ascent over rolling bench E. of foot hills bears N. and S.; leave level land.
- 39.41 Trail bears $S.50^{\circ} E.$ and $N.50^{\circ} W.$
- 40.00 Set a trachyte stone $16 \times 10 \times 5$ ins., 11 ins. in the ground for $1/4$ sec. cor., marked $1/4$ on N. face; dug pits $18 \times 18 \times 12$ ins., E. and W. of stone, 3 ft. dist.; and raised a mound of earth, $3 \frac{1}{2}$ ft. base, $1 \frac{1}{2}$ ft. high, N. of cor.
- 54.50 Road from Enterprise to Modena bears S. and N.
- 61.50 Trail bears N. and S.
- 69.00 Begin ascent of foot hills and low ridges on W. side of bench bears N. and S.
- 80.00 Set a trachyte stone $14 \times 6 \times 6$ ins., 11 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, marked with

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	<p>1 notch on S. and E. edges; and raised a mound of stone 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Cor. is on E. slope of ridge about 50 ft. above bottom of foot hills.</p> <p>Land on E., nearly level; in the middle part rolling bench; and on the W. foot hills and ridges.</p> <p>Soil, sandy and clay loams, gravelly and stony; 1st, 2nd, and 4th rate.</p> <p>No timber.</p> <p>Undergrowth, shrubbery and grasses afford fair grazing.</p> <p>Mountainous land or land covered with dense undergrowth on 80.00 chs.</p>
7.00	<p>W., on sectional correction line bet. secs. 26 and 35. Ascend gradually over E. and S.E. slope of ridges.</p> <p>Hollow about 50 lks. wide and 25 ft. deep, drains S.E.</p>
24.50	<p>Top of ridge about 75 ft. high, bears N.E. and S.W.; descend over N.W. and W. slope of ridges.</p>
27.75	<p>Hollow about 75 lks. wide and 40 ft. deep, drains N. 65° E.; ascend from hollow over S.E. slope of ridges.</p>
38.00	<p>Top of spur on S.E. slope about 75 ft. high, bears S. 15° E. and N. 15° W.; descend over S.W. slope.</p>
40.00	<p>Set a trachyte stone 18x10x6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.</p>
57.00	<p>Hollow at foot of descent about 75 ft. below top of last spur, about 50 lks. wide and 25 ft. deep, drains S.E.; ascend over S.E. slope of ridges.</p>
80.00	<p>Set a trachyte stone 15x12x4 ins., 10 ins. in the ground, for cor. of secs. 26, 27, 34 and 35, marked with 1 notch on S. and 2 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.</p> <p>Cor. is on S.E. slope of high ridge about 35 ft. above the last hollow.</p> <p>Land mountainous and broken ridges.</p>

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	<p>Soil, gravelly and stony; 3rd. and 4th. rate.</p> <p>Timber, scattering cedar on last 45.00 chs.; scattering juniper trees on 2nd. and 3rd. 1/4 miles.</p> <p>Undergrowth, medium dense sage and scattering service berry brush, which with shrubbery and grasses in abundance afford fair grazing.</p> <p>Mountainous land on 80.00 chs.</p> <p>November 10, 1899: At this sec. cor., I set off 17° 14' 30" S. on the decl. arc; and, at 11^h 44^m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 38' " N.</p>
	<p>W., bet. secs. 27 and 34, on sectional correction line.</p> <p>Ascend over S.E. and E. slopes of high ridges.</p>
35.70	Top of ridge about 150 ft. high bears E. and W.; thence gradually ascend over top of ridge.
38.20	Begin to descend over S.W. slope of ridge, bears S. 15° E. and N. 15° W.
40.00	Set a volcanic stone 14x10x6 ins., 10 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
67.80	Ravine at foot of descent about 100 ft. below top of ridge, about 50 lks. wide and 25 ft. deep, drains S. 20° W.; ascend from ravine over S.E. slope of ridge.
69.80	Top of spur on S.E. slope about 75 ft. high, bears N.E. and S.W.; descend over S. and S.W. slopes of ridges and spur.
80.00	<p>Set a trachyte stone 24x8x6 ins., 18 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, marked with 1 notch on S. and 3 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.; from which cor.,</p> <p>A cedar 8 ins. diam., bears S. 84° 15' W., 64 lks. dist., marked</p> <p>T.36 S., R.17 W., S.33, B.T.</p> <p>A cedar 10 ins. diam., bears S. 55° 45' E., 160 lks. dist., marked</p>

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	T.36 S., R.17 W., S.34, B.T.
	Land mountainous and broken ridges.
	Soil, gravelly and stony; 3rd. and 4th. rate.
	Timber, scattering cedars.
	Medium dense sage undergrowth, with grasses and shrub- bery in sufficient quantity to make fair grazing.
	Mountainous land on 80.00 chs.
	W., bet. secs. 28 and 33, on sectional correction line.
	Descend over W. and N.W. slopes of ridges.
2.80	Ravine about 50 lks. wide and 25 ft. deep, drains N. 70° W. about 5.00 chs., thence S. 70° W.
27.32	Same ravine about 50 lks. wide and 25 ft. deep, drains S. 40° W.; ascend from ravine.
30.65	Trail bears N. 20° W. and S. 20° E.
40.00	Set a trachyte stone 16x10x6 ins., 11 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. The cor. is on E. slope of ridge about 50 ft. above the ravine, and about 100 ft. below the sec. cor.
47.00	Top of ridge about 100 ft. high, bears N. and S. 20° W.; descend over W. and S.W. slopes of ridges.
60.50	Hollow about 75 lks. wide and 40 ft. deep, drains S. 10° E.
79.00	Trail bears S. 25° E. and N. 25° W.
79.20	Road from Enterprise to Modena at foot of ridges, about 75 ft. below top of last ridge, bears S. 25° E. and N. 25° W.; ascend.
80.00	Set a trachyte stone 14x8x6 ins., 10 ins. in the ground, for cor. of secs. 28, 29, 32 and 33, marked with 1 notch on S. and 4 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
	Land mountainous and broken ridges.
	Soil, gravelly and stony; 3rd. and 4th. rate.
	Timber, scattering cedars on E. 52.00 chs.
	Medium dense sage, scattering service berry and juni-

5

Subdivisions of T.36 S., R.17 W.-Continued.

Chains. per with shrubbery and grasses afford fair grazing.
Mountainous land on 80.00 chs.

November 10, 1899.

November 11, 1899: I set off $37^{\circ}58'$ N. on the lat.
arc; $17^{\circ}29'$ S. on the decl. arc; and at 10^h a.m.,
1 m. t., determine a true meridian with the solar, at
the cor. of secs. 28, 29, 32 and 33 already described;
thence I run

W., bet. secs. 29 and 32, on sectional correction line.
Ascend over E. and N.E. slopes of ridges.

28.65 Hollow about 75 lks. wide and 30 ft. deep, drains N.
40° E.; ascend from hollow over N.E. slope of ridges.

40.00 Set a trachyte stone 16x10x6 ins., 11 ins. in the
ground, for 1/4 sec. cor., marked 1/4 on N. face; and
raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N.
of cor. Pits impracticable.

63.00 Top of spur about 100 ft. high, on N.E. slope of ridge
bears N.E. and S.W.; descend over N.W. slope of spur.

72.00 Bottom of hollow at N.W. foot of spur, about 1.00 ch wide
and 50 ft. deep, drains N. 40° E.; ascend from hollow
over E. slope of ridge or spur.

77.00 Top of spur about 50 ft. high, on N.E. slope of ridge,
bears N. and S.; descend over N.W. slope of spur.

80.00 Set a trachyte stone 16x12x8 ins., 11 ins. in the
ground, for cor. of secs. 29, 30, 31 and 32, marked with
1 notch on S. and 5 notches on E. edges; and raised a
mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.
Pits impracticable.

Cor. is on N.W. slope of spur which projects from N.E.
slope of high ridge, about 50 ft. below top of spur.
Land mountainous and broken ridges.

Soil, gravelly and stony; 3rd. and 4th. rate.

No timber, except very few cedars, and scattering juniper
Undergrowth, medium dense sage, scattering service ber-
ry, and shrubbery and grasses, which combine to make
good grazing.

Mountainous land on 80.00 chs.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.

- W., on sectional correction line bet. secs. 30 and 31.
Descend over N.W. slope of spur which projects from
N.E. slope of high ridge.
- 9.27 N.W. foot of spur about 50 ft. below the sec. cor.,
descends to N.E. and rises rapidly to S.W.; road from
Hebron to Modena bears S.W. and N.E.; ascend over S.E.
and S. slopes of ridges.
- 27.70 Trail bears N.E. and S.W.
- 40.00 Set a lava stone 16x10x6 ins., 11 ins. in the ground,
for 1/4 sec. cor., marked 1/4 on N. face; and raised a
mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.
Pits impracticable. The cor. is on S. slope of high
ridge about 100 ft. above the road.
- 66.00 Top of ridge about 250 ft. above the 1/4 sec. cor.,
bears N. and S.; descend over W., S. and S.W. slopes of
high ridge.
- 84.90 Intersect the W. bdy. of the Tp., at the old cor. of
secs. 25, 30, 31 and 36, which is a flat stationery
boulder, 10x3x 1/2 ft., above ground, marked and wit-
nessed as described by the Surveyor general.
The cor. is on S.W. slope of ridge about 150 ft. below
top of last ridge.
Land mountainous and broken.
Soil, gravelly and stony; 3rd. and 4th. rate.
Timber, scattering cedars and nut. pine on W. 66.00 chs
Medium dense sage and service berry undergrowth, with
shrubbery and grasses in abundance, which afford fair
grazing.
Mountainous land on 84.90 chs.
November 11, 1899: At this cor. of secs. 25, 30, 31 and
36, I set off 17°31' S. on the decl. arc; and, at 11^h44^m
a.m., l.m.t., observe the sun on the meridian; the re-
sulting lat. is 37°38' N.

November 11, 1899.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	<p>November 13, 1899: I set off $37^{\circ}38'$ N. on the lat. arc; $18^{\circ}1'$ S. on the decl. arc; and, at $8^{h}44^{m}$ a.m., with the solar l.m.t., determine a true meridian, at the cor. of secs. 25, 26, 35 and 36, heretofore described.</p> <p>Thence I run</p> <p>S., $0^{\circ}1'$ E. on a true line bet. secs. 35 and 36, knowing from previous retracement of the S. bdy. of the Tp. that a closing cor. will be necessary.</p> <p>Descend over S. slope of ridge.</p>
3.30	Hollow at S. foot of ridge about 25 ft. below top, about 50 lks. wide and 10 ft. deep, drains E.; ascend from hollow over N.E. slope of ridge.
10.54	Top of ascent on N.E. slope of ridge, about 75 ft. above the hollow, bears N.E. and S.W.; descend along E. slope of ridge.
33.79	Foot of ridges about 75 ft. below top of ascent, bears $N.70^{\circ} W.$ and $S.70^{\circ} E.$; thence over broken foot hills.
34.70	Trail bears E. and W..
37.50	Begin ascent over N.E. slope of ridge, bears $N.70^{\circ} W.$ and $S.70^{\circ} E.$;
40.00	Set a trachyte stone $12 \times 12 \times 5$ ins., 8 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone, 2 ft. base, $1\ 1/2$ ft. high, W. of cor. Pits impracticable.
55.50	Top of ridge on N.E. slope of high mountain, about 75 ft. high, bears S.E. and N.W.; descend over S.E. slope of ridges.
69.75	Foot of ridges about 75 ft. below the top, bears $N.75^{\circ} W.$ and $S.75^{\circ} E.$; ascend.
70.60	Trail bears $S.70^{\circ} E.$ and $N.70^{\circ} W.$
71.85	Wash 15 lks. wide and 4 ft. deep, drains $S.75^{\circ} E.$
72.40	Road from Enterprise to the wood hills bears $S.85^{\circ} E.$ and $N.70^{\circ} W.$
80.54	<p>Intersect the S. bdy. of the Tp. 104 lks., $N.88^{\circ}56' E.$, from the old cor. of secs. 1, 2, 35 and 36, heretofore described in Notes of Retracement of this bdy.</p> <p>Set a trachyte stone $16 \times 10 \times 6$ ins., 11 ins. in the ground, for closing cor. of secs. 35 and 36, marked C.C. on N., with 1 groove on E. and 5 grooves on W. faces; and raised a mound of stone, 2 ft. base, $1\ 1/2$ ft. high, N.</p>

Subdivisions of T.36 S., R.17 W.-Continued.

Chains. of cor. Pits impracticable.

I destroy the marks on the old cor. of secs. 1, 2, 35 and 36, that pertain to secs. 35 and 36, and remark the same for corner of secs. 1 and 2, T.37 S., R.17 W. only.

Land mountainous and broken ridges.

Soil, gravelly and stony; 3rd. and 4th. rate.

No timber.

Medium dense sage undergrowth with shrubbery and grasses, afford fair grazing.

Mountainous land on 80.54 chs.

From the cor. of secs. 25, 26, 35 and 36, heretofore described, I run

0001' W.

N., bet. secs. 25 and 26.

Ascend over S. slope of spur.

- 5.15 Top of spur, ^{75 ft. high} on E. slope of high ridge; bears S. 80° E. and N. 80° W. descend over N.E. slope.
- 16.56 Trail bears N. 30° W. and S.E.; foot of spur bears N.W. and S.E.; thence over nearly level ground, on W. edge of desert.
- 40.00 Set a trachyte stone 18x12x8 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.
- 48.40 Trail bears S.E. and N.W.
- 49.40 Wash 15 lks. wide and 3 ft. deep, drains S. 80° E.; ascend from wash over S.E. slope of spur.
- 57.20 Top of spur on N.E. slope of high ridge, about 75 ft. high, bears S.E. and N.W.; descend over N.E. slope of spur.
- 73.20 N.E. foot of spur, bears S.E. and N.W.; thence descend along E. slope of foot hills.
- 80.00 Set a trachyte stone 15x12x6 ins., 10 ins. in the ground, for cor. of secs. 23, 24, 25 and 26, marked with 2 notches on S. and 1 notch on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.
- Pits impracticable. Cor. is on E. slope of ridge about

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	50 ft. below foot of last spur. Land partly nearly level, slightly rolling, and partly mountainous and broken ridges. Soil on the ridges, gravelly and stony; 3rd. rate; and in the valley the soil is clay with some gravel; 2nd. rate. No timber. Medium dense sage undergrowth, with sufficient shrubbery to make fair grazing; also sprinkling of native grasses. Mountainous land on 47.16 chs.
40.00	E., on a random line bet. secs. 24 and 25. Set temp. $1/4$ sec. cor.
79.98	Intersect E. bdy. of the Tp., 6 lks. N. of the cor. of secs. 19, 24, 25 and 30, heretofore described in resurvey of this bdy. Thence I run N. $89^{\circ}57'$ W. on a true line bet. secs. 24 and 25. Over nearly level land; through dense sage and rabbit brush undergrowth.
12.18	Shoal Creek wash 1.00 ch. wide and 2 ft. deep, drains N.E.; ascend from wash over rolling E. slope of bench on W. edge of desert.
20.30	Trail bears N. and S.
30.48	Trail bears S. 20° E. and N. 20° W.
39.99	Set a trachyte stone 16x12x5 ins., 11 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and dug pits 18x18x12 ins., E. and W. of stone, 3 ft. dist.; and raised a mound of earth, 3 $1/2$ ft. base, 1 $1/2$ ft. high, N. of cor.
45.65	Road from St. George to Modena bears S.E. and N.W.
50.78	Trail bears S.E. and N.W.
51.70	Leave dense undergrowth bears N. and S.; enter medium dense and scattering sage.
53.25	Road from Enterprise to Modena, bears S. and N.
61.68	Begin ascent of foot hills on W. edge of bench bears N.W. and S.E.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.

79.98 The cor. of secs. 23, 24, 25 and 26.

Land nearly level on E., rolling bench in central part, and broken ridges on W.

Soil, in the valley, rich sandy loam; 1st. rate; on the bench, clay and gravelly; 2nd. rate; and on the ridges, gravelly and stony; 3rd. and 4th. rate.

Undergrowth of sage and rabbit brush, with shrubbery and grasses afford fair grazing.

No timber.

Mountainous land or land covered with dense undergrowth on 70.00 chs.

November 13, 1899: At this cor. of secs. 23, 24, 25 and 26, I set off $180^{\circ} 3'$ S. on the decl. arc; and, at 11h44^m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ} 39'$ N.

N., $0^{\circ} 1'$ W., bet. secs. 23 and 24; gradually descending over E. and N.E. slopes of ridges.

10.00 Foot of mountain about 50. ft. below the sec. cor., bears N.W. and S.E.; thence over rolling foot hills, still descending.

27.30 Old road from St. George to Modena, bears S.E. and N.W.

27.65 New road from St. George to Modena bears S.E. and N.W.

36.74 Trail bears S.E. and N.W.

40.00 Set a trachyte stone $12 \times 8 \times 6$ ins., 8 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; dug pits $18 \times 16 \times 12$ ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, $3 \frac{1}{2}$ ft. base, $1 \frac{1}{2}$ ft. high, W. of cor. This cor. is at foot of foot hills which bears S.E. and N.W., about 100 ft. below the sec. cor.

Thence over nearly level land on bench which slopes E. on W. edge of desert.

40.84 Trail bears $S. 35^{\circ} E.$ and $N. 35^{\circ} W.$

57.30 Trail bears $S. 30^{\circ} E.$ and $N. 30^{\circ} W.$

80.00 Set a trachyte stone $12 \times 10 \times 8$ ins., 8 ins. in the ground for cor. of secs. 13, 14, 23 and 24, marked with 3 notches on S. and I notch on E. edges; dug pits $18 \times 18 \times 12$ ins.,

Subdivisions of T.36 S.,R.17 W.-Continued.

Chains. in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor. . . .
 Land partly mountainous and broken ridges, and partly nearly level and rolling bench. . . .
 Soil on the ridges, gravelly and stony; 3rd. rate; on the bench, clay with slight intermixture of gravel; 2nd. rate. . . .
 Medium dense sage undergrowth and shrubbery and grasses, which afford fair grazing. . . .
 No timber.
 Mountainous land on 40.00 chs.

S., 89° 57' E. on a random line bet. secs. 13 and 24.
 40.00 Set temp. 1/4 sec. cor.
 80.02 Intersect E. bdy. of Tp., 4 lks. S. of the cor. of secs. 13, 18, 19 and 24, heretofore described in Notes of Resurvey of this bdy.
 Thence I run
 N., 89° 59' W. on a true line bet. secs. 13 and 24.
 Ascend over E. slope of rolling bench on W. edge of desert; through dense sage undergrowth.
 40.01 Set a trachyte stone 12x8x6 ins., 8 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18x12 ins., E. and W. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.
 77.70 Old road bears N. and S.
 80.02 The cor. of secs. 13, 14, 23 and 24.
 Land rolling bench sloping E. and N.E.
 Soil, rich clay intermixed with gravel; 2nd. rate.
 No timber.
 Undergrowth, shrubbery and grasses afford fair grazing.
 Dense undergrowth on 80.02 chs.

November 13, 1899.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	N., 0° 1' W., bet. secs. 13 and 14; over rolling bench sloping E. and N.E.; through dense sage undergrowth.
15.50	Road bear N. 10° E. and S. 10° W.
27.20	Trail bears E. and W.
40.00	Set a lava stone 16x10x8 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.
46.85	Trail bears S.E. and N.W.
59.90	Trail bears N. 60° E. and S. 60° W.
80.00	Set a trachyte stone 14x8x6 ins., 10 ins. in the ground, for cor. of secs. 11, 12, 13 and 14, marked with 4 notches on S. and 1 notch on E. edges; dug pits 18x18x12 ins., in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Line passes over rolling bench sloping E. and N.E. Soil, clay and gravelly; 2nd. rate. No timber. Undergrowth of sage with shruberry and grasses afford fair grazing. Dense undergrowth on 80.00 chs.
40.00	S., 89° 59' E. on a random line bet. secs. 12 and 13. Set temp. 1/4 sec. cor.
80.00	Intersect E. bdy. of Tp., 25 lks. S. of the cor. of secs. 7, 12, 13 and 18, heretofore described in Notes of Re-survey of this bdy. Thence I run S. 89° 50' W., on a true line bet. secs. 12 and 13 Ascend over rolling bench on W. side of desert, sloping E. and N.E.; through dense sage undergrowth.
6.20	Trail bears N.W. and S.E.
18.00	Trail bears N.W. and S.E.
53.00	Trail bears N. 50° W. and S. 50° E.
40.00	Set a trachyte stone 14x14x7 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18x12 ins., E. and W. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

13

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.

- 40.70 Leave dense sage undergrowth, bears N. and S.; enter scattering sage.
- 45.20 Trail bears N.W. and S.E.
- 58.85 Trail bears N. 40° W. and S. 40° E.
- 64.50 Enter dense sage undergrowth bears N. and S.; leave scattering sage.
- 80.00 The cor. of secs. 11, 12, 13 and 14.
Land rolling bench, sloping E. and N.E.
Soil, rich clay intermixed with gravel; 2nd. rate.
No timber.
Undergrowth of sage with shrubbery and grasses afford good grazing.
Dense undergrowth on 56.20 chs.

N., 001° W. bet. secs. 11 and 12.

Over slightly rolling bench on W. edge of desert, which slopes E. and N.E.; through dense sage undergrowth.

- 1.00 Leave dense sage and enter scattering sage undergrowth, bears N.E. and W.
- 12.18 Trail bears S. 35° E. and N. 35° W.
- 24.88 Trail bears S.E. and N.W.
- 40.00 Set a trachyte stone 18x8x6 ins., 12 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 $1/2$ ft. base, 1 $1/2$ ft. high, W. of cor.
- 40.88 Trail bears S. 10° E. and N. 10° W.
- 42.38 Recross same trail bears S. 10° W. and N. 10° E.
- 63.03 Trail bears S. 35° E. and N. 25° W.
- 76.78 Trail bears S. 25° E. and N. 25° W.
- 80.00 Set a lava stone 22x8x6 ins., 17 ins. in the ground, for cor. of secs. 1, 2, 11 and 12, marked with 5 notches on S. and 1 notch on E. edges; dug pits 18x18x12 ins., in each sec., 5 $1/2$ ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
Land slightly rolling bench, sloping E. and N.E.

46.20
23.80

1
79

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	Soil, clay and gravelly; 2nd. and 3rd. rate. No timber. Undergrowth, shrubbery and grasses afford fair grazing. Dense undergrowth on 1.00 chain. November 14, 1899: At this sec. cor., I set off 180° 19' S. on the decl. arc; and, at 11h45 ^m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 41' N.
40.00	N., 89° 50' E. on a random line bet. secs. 1 and 12. Set temp. 1/4 sec. cor.
79.84	Intersect E. bdy. of the Tp., 12 lks. S. of the cor. of secs. 1, 6, 7 and 12, established by me, and described in notes of Resurvey of this bdy. Thence I run S. 89° 45' W., on a true line bet. secs. 1 and 12. Over slightly rolling bench on W. edge of desert; grade ascending; through dense sage undergrowth.
2.16	Trail bears S.E. and N.W.
18.62	Trail bears S. 25° E. and N. 25° W.
27.81	Trail bears S. 40° E. and N. 40° W.
39.71	Trail bears S. 30° E. and N. 30° W.
39.92	Set a lava stone 14x8x6 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18x12 ins., E. and W. of stone 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.
53.36	Trail bears S. 30° E. and N. 30° W.
64.26	Trail bears S.E. and N.W.
66.60	Leave dense sage undergrowth bears N. and S.; enter scattering sage.
77.26	Trail bears S. 40° E. and N. 40° W.
79.84	The cor. of secs. 1, 2, 11 and 12. Land, slightly rolling bench, sloping E. and N.E. Soil, clay slightly intermixed with gravel, except W. 6.50 chs., which is gravelly; 2nd. and 3rd. rate. No timber. Undergrowth, shrubbery and grasses afford fair grazing

Subdivisions of T.36 S., R.17 W.-Continued.

Chains. Dense undergrowth on 66.60 chs.

November 14, 1899: I set off $37^{\circ}42'$ N. on the lat. arc; $18^{\circ}20'$ S. on the decl. arc; and, at $2^h45'$ p.m. l.m.t., determine with the solar, a true meridian, at the cor. of secs. 1, 2, 11 and 12, already described. Thence I run $N.0^{\circ}1'$ W., on a true line bet. secs. 1 and 2, knowing that a closing cor. will be necessary on N. bdy. of Tp. Over slightly rolling bench on E. side of foot hills, and W. edge of the desert; through scattering sage undergrowth.

- 2.05 Trail bears $S.30^{\circ}$ E. and $N.30^{\circ}$ W.
- 4.12 Dry well bears E. of line about 2.00 chs. dist.
- 11.37 Enter dense sage undergrowth, bears E. and W.; leave scattering sage.
- 18.02 Enter scattering sage bears E. and W.; leave dense sage undergrowth.
- 19.75 Trail bears $S.20^{\circ}$ E. and $N.20^{\circ}$ W.
- 27.20 Trail bears $N.20^{\circ}$ W. and $S.20^{\circ}$ E.
- 34.12 Trail bears E. and W.
- 40.00 Set a volcanic stone $24 \times 10 \times 4$ ins., 18 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; dug pits $18 \times 18 \times 12$ ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, $3 \frac{1}{2}$ ft. base, $1 \frac{1}{2}$ ft. high, W. of cor.
- 44.32 The N.E. cor. stake of Kodock Mining claim bears E. of line 1.65 chs. dist.
- 46.20 Old road bears $N.25^{\circ}$ E. and $S.25^{\circ}$ W.; point of ridge with mining cabin on W. side, bears S.W. about 15.00 chs. dist.
- 55.02 Trail bears N.W. and S.E.
- 74.00 Begin gradual ascent on S. slope adjoining foot hills, bears E. and W.
- 98.20 Old road bears N.E. and S.W.
- 111.00 Foot hills at top of slope bears E. and W.; ascend rapidly over S. slope of ridge; trail bears W. and S. 80° E.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.

- 127.00 Top of sharp ridge about 75 ft. high, bears E. and N. 80° W.; descend over N.E. slope of ridge.
- 135.00 Enter dense sage undergrowth, bears E. and W.; leave scattering sage.
- 142.00 N.E. foot of ridge bears S. 30° E. and N. 30° W.; thence over rolling foot hills; leave dense sage undergrowth bears N.E. and S.W.; enter scattering sage.
- 150.00 Begin ascent of ridges bears S.E. and N.W.
- 157.50 Trail bears S.E. and N.W.
- 162.94 Intersect 7th. Standard Parallel South, 24.83 chs. W. of the old standard cor. of secs. 35 and 36, T.36 S., R. 17 W., which is a volcanic stone 7x6x8 ins. above ground, marked and witnessed as described by the Surveyor General.
- Set a trachyte stone 15x10x8 ins., 10 ins. in the ground, for closing cor. of secs. 1 and 2, marked C.C. on S., with 1 groove on E. and 5 grooves on W. faces; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of cor. Pits impracticable.
- The cor. is on S. slope of ridge about 50 ft. above the foot of same.
- Land mostly rolling bench with general slope Easternly, with mountainous land and broken ridges on Northern part.
- Soil, on bench clay intermixed with gravel; 2nd. rate. On the ridges the soil is gravelly and stony; 3rd. and 4th. rate.
- No timber.
- Undergrowth, shrubbery and grasses afford fair grazing.
- Mountainous land or land covered with dense undergrowth on 58.59 chs.

November 14, 1899.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains. November 15, 1899: I set off $37^{\circ}38'$ N. on the lat. arc; $18^{\circ}33'$ S. on the decl. arc; and, at $9^{h}45^{m}$ a.m., l.m. t., determine a true meridian with the solar, at the cor. of secs. 26, 27, 34 and 35, on sectional correctional line, heretofore described.

Thence I run

S. $0^{\circ}1'$ E., on a true line bet. secs. 34 and 35, knowing from previous retracement of S. bdy. of Tp. that a closing cor. will be necessary.

Ascend over N.E., E. and S.E. slopes of broken ridges.

13.30 Wash about 15 lks. wide and 4 ft. deep, drains N. 75° E.

40.00 Set a trachyte stone $14 \times 8 \times 6$ ins., 10 ins. in the ground for $1/4$ sec. cor., marked $1/4$ on W. face; from which cor.

A cedar 14 ins. diam., bears S. $63^{\circ}30'$ W., 51 lks. dist., marked

$1/4$ S., 34, B.T.

A cedar 16 ins. diam., bears N. $85^{\circ}30'$ E., 84 lks. dist., marked

$1/4$ S. 35, B.T.

47.80 Wood road from Enterprise, bears S.E. and N.W.

59.15 Hollow about 50 lks. wide and 25 ft. deep, drains N. 80° E.

70.00 Top of ridge about 150 ft. above the sec. cor., bears N. 60° E., descending, and S. 60° W. ascending; descend over S.E. slope of ridge.

76.80 Bottom of hollow at S.E. foot of ridge about 75 ft. below the top of ridge, about 50 ft. wide and 25 ft. deep, drains N. 60° E.; ascend over N.W. and N. slopes of ridge.

80.00 Intersect S. bdy. of Tp., S. $89^{\circ}31'$ E., 1.45 chs. dist.; from old cor. of secs. 2, 3, 34 and 35, heretofore described in Notes of retracement of this bdy.

Set a trachyte stone $14 \times 9 \times 4$ ins., 10 ins. in the ground for closing cor. of secs. 34 and 35, marked C.C. on N. with 2 grooves on E. and 4 grooves on W. faces; and raised a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. Cor. is on Northerly slope of ridge about 50 ft. above the hollow.

I destroy the marks on the old cor. of secs. 2, 3, 34 and

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	35, that pertain to secs. 34 and 35, and remark same for cor. of secs. 2, and 3, T. 37 S., R. 17 W., only. Land mountainous and broken ridges. Soil, clay with intermixture of gravel on N. part, and gravelly and stony on the S.; 2nd. and 4th. rate. Timber, scattering cedar and nut pine on first and last 1/4 miles; medium dense cedars and pines on 2nd. and 3rd. 1/4 miles. Medium dense sage with shrubbery and grasses in abundance afford good grazing. Mountainous land on 80.00 chs.
	From the cor. of secs. 26, 27, 34 and 35, on sectional correction line, already described; I run N. 0° 1' W., bet. secs. 26 and 27. Descend over N.E. slope of ridge.
3.00	Foot of descent at S.W. foot of ridge, about 25 ft. below the sec. cor., bears S. 50° E., descending, and N. 50° W., ascending; ascend over S.W. slope of ridge.
16.00	Top of ridge about 150 ft. high, bears N.W., and S. 20° E. Descend over N.E. slope of ridge.
21.40	Ravine about 50 lks. wide and 40 ft. deep, drains N. 75° E.; thence along E. slope of ridge, still descending.
36.10	Ravine at foot of ridge about 50 lks. wide and 20 ft. deep, and about 100 ft. below top of ridge, drains S. 80° E.; ascend from ravine over S.E. slope of ridge.
40.00	Set a trachyte stone 15x10x8 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. The cor. is on S.E. slope of ridge about 25 ft. above last ravine.
60.00	Top of ridge about 150 ft. above the 1/4 sec. cor.; descends rapidly to E. and rises N. 70° W.; descend over N.E. slope of ridge.
63.50	Bottom of hollow at foot of ridge about 50 ft. below the top, about 50 lks. wide and 25 ft. deep, drains S.E.; ascend over S.W. slope of ridge.

Subdivisions of T.36 S., R.17 W.--Continued.

Chains.

69.25 Top of main ridge about 350 ft. high, bears N. 80° E. and S. 70° W.; about 15.00 chs. S. 70° W., is a mountain peak about 400 ft. high. Descend rapidly over N. slope of high ridge.

75.00 On N.E. slope of ridge, still descending.

80.00 Set a trachyte stone 15x10x4 ins., 10 ins. in the ground, for cor. of secs. 22, 23, 26 and 27, marked with 2 notches on S. and E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

Pits impracticable. The cor. is on N.E. slope about 100 ft. below top of ridge.

Land mountainous and broken.

Soil, gravelly and stony; 3rd. and 4th. rate.

Timber; scattering cedars on S. 42.00 chs.

Undergrowth of sage with shrubbery and grasses in sufficient quantity to afford good grazing.

Mountainous land on 80.00 chs.

November 15, 1899; At this cor. of secs. 22, 23, 26 and 27, I set off $18^{\circ}34'30''$ S. on the decl. arc; and, at 11^h 45^m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ}39'$ N.

E., on a random line bet. secs. 23 and 26.

40.00 Set temp. 1/4 sec. cor.

80.30 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 23, 24, 25 and 26, heretofore described.

Thence I run

N. $89^{\circ}57'$ W. on a true line bet. secs. 23 and 26.

Ascend over S.E. and S. slopes of ridges.

26.00 Mountain peak about 200 ft. high, bears N. about 5.00 chs.; line crosses foot of peak on S. slope of ridge.

-26.00 On N. slope of high ridge, still ascending.

29.60 Mountain peak about 250 ft. high, bears S. about 5.00 chs.; line passes over N. slope about 50 ft. below top of peak.

33.95 Top of ridge about 300 ft. high, bears N. 65° W. and S. 60° E.; descend over N.W. slope of ridge.

Subdivisions of T.36 S.-R.17 W.-Continued.

Chains.

- 35.60 Descend over mass of volcanic stone about 40 ft. high.
- 40.15 Set a trachyte stone 15x12x6 ins., 10 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, N. of cor. Pits impracticable. The cor. is on N.W. slope of high ridge about 50 ft. below top of ridge; continue on descent over N.W. slope over spurs and hollows with course of drainage to N.
- 74.10 Hollow at foot of ridge about 150 ft. below the top, on N. slope, about 50 lks. wide and 25 ft. deep, drains N. 10° E.; ascend from hollow along N. slope of ridge.
- 80.30 The cor. of secs. 22, 23, 26 and 27, about 50 ft. above last hollow on N. slope of ridge. Land mountainous and broken. Soil gravelly and stony; 3rd. and 4th. rate. Timber, scattering cedars and juniper trees on 3rd. $1/4$ mile. Sage undergrowth with shrubbery and grasses in sufficient quantity to make fair grazing. Mountainous land on 80.30 chs.

- N. $0^{\circ} 1'$ W., bet. secs. 22 and 23; descending over N. and N.E. slopes of high ridge.
- 10.50 N. foot of high mountain about 100 ft. below the sec. cor., bears N. 60° W. and S. 60° E.; thence over broken broken ridges and foot hills, still descending.
- 40.00 Set a trachyte stone 20x12x8 ins., 15 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, W. of cor. Pits impracticable. Cor. is at N. and W. foot of ridges about 75 ft. below the ft. of high mountain; thence over nearly level ground slightly rolling, with general course of drainage to the S.E.; enter dense sage undergrowth bears N.E. and S.W.
- 70.90 Road from St. George to Modena, bears S. 50° E. and N. 50° W.; leave dense sage undergrowth bears S.E. and

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Subdivisions of T.36 S., R.17 W.-Continued.

Chains. N.W.; enter scattering sage; gradually ascend.
 72.40 Trail bears E. and W.
 77.47 Trail bears S. 80° E. and N. 80° W.
 80.00 Set a trachyte stone 12x10x8 ins., 8 ins. in the
 ground, for cor. of secs. 14, 15, 22 and 23, marked with
 3 notches on S. and 2 notches on E. edges; dug pits 18
 x18x12 ins. in each sec., 5 1/2 ft. dist.; and raised a
 mound of earth, 4 ft. base, 2 ft. high, W. of cor.
 Land partly mountainous and broken ridges; partly
 rolling and nearly level land.
 Soil, on the ridges, gravelly and stony; 3rd. and 4th.
 rate. On the rolling and nearly level ground, the soil
 is clay, slightly intermixed with gravel; 2nd. rate.
 Sage undergrowth partly scattering and partly dense,
 with shrubbery and grasses in sufficient quantity
 to make fair grazing.
 No timber, except scattering cedars on first 1/2
 mile.
 Mountainous land or land covered with dense under-
 growth on 70.90 chs..

November 15, 1899.

S., $89^{\circ} 57'$ E. on a random line bet. secs. 14 and 23.
 40.00 Set temp. 1/4 sec. cor.
 80.40 Intersect N. and S. line, 35 lks. S. of the cor. of secs.
 13, 14, 23 and 24, heretofore described.
 Thence I run,
 S. $89^{\circ} 48'$ W. on a true line bet. secs. 14 and 23;
 gradually ascending over slightly rolling land;
 through dense sage undergrowth.
 32.95 Trail bears S.W. and N.E.
 40.20 Set a trachyte stone 15x10x3 ins., 10 ins. in the
 ground, for 1/4 sec. cor., marked 1/4 on N. face; dug
 pits 18x18x12 ins. E. and W. of stone, 3 ft. dist.; and
 raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high,
 N. of cor.
 53.75 Trail bears S.E. and N.W.
 59.00 Leave dense sage undergrowth bears S.E. and N.W.; enter

Subdivisions of T.36 S.-R.17 W.-Continued.

Chains.	scattering sage.
65.00	Trail bears S.40° E. and N.40° W.
69.00	Enter dense sage undergrowth bears S.E. and N.W.; leave scattering sage.
75.00	Leave dense sage undergrowth bears N. and S.; enter scattering sage.
80.40	The cor. of secs. 14, 15, 22 and 23.
	Land slightly rolling sloping E. and S.E.
65.00 15.40	Soil, clay with slight intermixture with gravel; 2nd. rate.
	No timber.
	Undergrowth of sage with shrubbery and grasses afford fair grazing.
	Dense undergrowth on 65.00 chs.
	N., 0° 1' W. bet. secs. 14 and 15..
	Gradually ascend over slightly rolling ground.
19.00	Trail bears N.60° E. and S.60° W.
21.00	Foot of ridges bears N.65° E. and S.65° W.; ascend over S.E. slope of ridges.
40.00	Set a volcanic stone 18x10x4 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins. N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor. The cor. is on S.E. slope of ridge about 50 ft. above foot of same.
63.00	Top of ridge about 150 ft. above the 1/4 sec. cor., bears S.30° W. and N.45° E.; thence over top of ridge gradually ascending; enter dense sage undergrowth bears N.E. and S.W.
80.00	Set a porphyry stone 10x10x6 ins., 7 ins. in the ground, for cor. of secs. 10, 11, 14 and 15, marked with 4 notches on S. and 2 notches on E. edges; dug pits 18x18x12 ins., in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
59.00 21.00	Land mountainous and broken and slightly rolling land.
	Soil, clay and gravelly with part of mountain and

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	ridges covered with small boulders; 2nd. and 3rd. rate. No timber. Undergrowth of sage with shrubbery and grasses afford fair grazing. Along the S. edge of top of mountain are porphyry ledges showing indications of copper and silver ores. Mountainous land on 59.00 chs.
40.00	N., $89^{\circ} 48'$ E. on a random line bet. secs. 11 and 14. Set temp. $1/4$ sec. cor.
80.48	Intersect N. and S. line, $1/4$ lks. S. of the cor. of secs. 11, 12, 13 and 14, heretofore described. Thence I run S. $89^{\circ} 42'$ W., on a true line bet. secs. 11 and 14. Gradually ascend on E. slope adjoining foot of hills.
3.55	Old road bears N. and S..
13.65	Trail bears N. and S.
22.00	Foot of hills at top of slope bears N. and S. 30° W.; ascend over S.E. and S. slope of ridges.
40.24	Set a trachyte stone $16 \times 10 \times 6$ ins., 11 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, $1 \frac{1}{2}$ ft. high, N. of cor. Fits impracticable. The cor. is on steep S.E. slope of ridge about 100 ft. above the sec. cor.
48.00	Top of ridge about 100 ft. above the $1/4$ sec. cor., on S. slope, bears N. and S.; descend over S.W. slope of ridge.
54.65	Ravine about 1.50 ch. wide and 75 ft. deep, drains S. 80° W.; ascend from ravine over E. and S.E. slopes of ridge.
56.55	Top of ascent on S.E. slope 50 ft. above the ravine, bears N. and S.; descend over broken porphyry ledges.
62.00	Foot of ledges about 60 ft. below top of same, bears N. ascending, and S., descending; ascend abruptly over ledges.
63.65	Top of ledges about 40 ft. high, bears N. and S.; thence over top of ledges, still ascending.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.

73.00 Top of mountain about 250 ft. high, bears N. and S.; enter dense sage undergrowth, bears N. and S.; gradually ascend over top of mountain.

74.75 A prospector's pit about 7 ft. long, 5 ft. wide and 4 ft. deep, with slight indications of copper and silver ores, bears N. of line about 160 lks.

75.00 Commence gradual descent over W. slope of mountain, bears N.E. and S.W.

80.48 The cor. of secs. 10, 11, 14 and 15.

Land partly on E. slope adjoining foot hills; but mostly mountainous and broken.

Soil, clay intermixed with gravel, gravelly and stony; 2nd. and 4th. rate.

No timber. Indications of silver and copper ores on points of ridges.

Sage undergrowth with shrubbery and grasses in abundance, which affords good grazing.

Mountainous land on 80.48 chs.

November 16, 1899: At this sec. cor., I set off $180^{\circ}49'30''$ S. on the decl. arc; and, at 11^h45^m a.m., l.m.t., observe the sun on the meridian; the resulting lat is $37^{\circ}41'$ N.

N., $0^{\circ}1'$ W., bet. secs. 10 and 11; gradually ascending over top of mountain; through dense sage undergrowth.

8.00 Commence to descend over N.E. slope of mountain, bears S.E. and N.W.

16.00 On N.W. slope of mountain still descending.

22.00 Hollow at foot of descent about 75 ft. below top of mountain, about 75 lks. wide and 25 ft. deep, drains S. 70° W.; ascend from hollow over S. slope of ridge.

28.00 Top of ridge about 60 ft. above the hollow, bears S. 80° W. and N. 80° E.; descend over N.W. slope of ridge.

40.00 Set a trachyte stone 18x10x6 ins., 12 ins. in the ground for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor. The cor. is at foot of descent on S. slope of ridge, in

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	hollow which drains W., and about 75 ft. below top of last ridge; ascend over S. slope of ridge.
59.00	Top of ridge about 75 ft. above the $1/4$ sec. cor., bears N.E. and S.W.; descend over N.W. slope of ridge.
77.00	N. foot of ridge about 100 ft. below top of last ridge, bears E. and W.; thence over broken foot hills, still descending.
80.00	Set a porphyry stone 12x10x5 ins., 8 ins. in the ground for cor. of secs. 2, 3, 10 and 11, marked with 5 notches on S. and 2 notches on E. edges; dug pits 18x18x12 ins., in each sec., 5 $1/2$ ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land mountainous and broken ridges. Soil, clay and gravelly with some parts stony; 2nd. and 3rd. rate. No timber. The ground is covered with dense sage undergrowth, shrubbery and grasses, which afford good grazing. Mountainous land on 80.00 chs.
November 16, 1899: I set off $37^{\circ}42'$ N. on the lat. arc; $18^{\circ}50'30''$ S. on the decl. arc; and, at 2 ^h 45 ^m a.m., l.m.t., determine a true meridian with the solar, at the cor. of secs. 2, 3, 10 and 11, heretofore described. Thence I run N., $89^{\circ}42'$ E., on a random line bet. secs. 2 and 11.	
40.00	Set temp. $1/4$ sec. cor.
80.46	Intersect N. and S. line 44 lks. N. of the cor. of secs. 1, 2, 11 and 12, heretofore described. Thence I run N. $89^{\circ}59'$ W., on a true line bet. secs. 2 and 11. Ascend over rolling E. slope adjoining foot hills; through scattering sage undergrowth.
3.60	Road bears N. and S.
4.95	Trail bears N. 30° W. and S. 30° E.
10.46	Foot of ridges at top of slope bears N. and S.; ascend over E. slope of ridges.
18.92	About 160 lks. N. is and old location monument.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	
23.50	A Miner's cabin bears N.18°30' E. about 37.00 chs. on W. point of ridge, which bears N.20° E. and S.20° W.
24.00	Top of ridge about 150 ft. above the sec. cor., bears N.10° E., about 30.00 chs., and S.10° W. On this ridge are a number of prospector's location monuments with indications of silver and copper ores.
24.72	Commence to descent over N.W. slope of ridge, bears N.20° E. and S.20° W.; enter dense sage & leave scattering sage undergrowth, bears N.E. and S.W.
27.70	The N. end center monument of the Dude mine bears N. about 4.85 chs. dist. from line.
35.70	About 50 lks. S. are two location monuments.
37.70	Foot of ridge about 100 ft. below the top, bears N.35° E. and S.35° W.; descend along N. slope of ridge.
40.23	Set a porphyry stone 12x12x5 ins., 8 ins. in the ground for 1/4 sec. cor.; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. Continue over ridges and small hollows on N. slope of ridge.
62.70	About 2.15 chs. N. of line are two location monuments. A prospector's hole bears N. of line about 2.60 chs.
72.87	Trail bears N.W. and S.E.
80.46	The cor. of secs. 2, 3, 10 and 11.
90.46	Land mostly mountainous and broken ridges, with E. 10.46 chs., on slope rolling.
	Soil, clay, gravelly and stony; 2nd. 3rd. and 4th. rate. No timber.
	Sage undergrowth with shrubbery and grasses afford good grazing.
	Along the tops and sides of ridges are indications of silver and copper minerals, all covered with old and new locations which I am unable to trace on account of the conflicting locations.
	Mountainous land on 70.00 chs.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	From the cor. of secs. 2, 3, 10 and 11, already described, I run
	N. 00° 1' W., on a true line bet. secs. 2 and 3, knowing that closing cor. will be necessary on 7th. Standard Parallel South.
	Over low rolling hills and slope adjoining foot hills on S. and W.; through dense sage undergrowth.
2.70	Old road bears E. and W.
15.10	Old road bears N. 50° E. and S. 50° W.
32.00	Leave dense sage undergrowth bears N. E. and S. W.; encattering sage.
38.55	Trail bears N. 50° W. and S. 50° E.
40.00	Set a trachyte stone 14x8x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.
41.68	Trail bears S. W. and N. E.
46.81	Trail bears E. and W.
50.45	Trail bears S. 70° E. and N. 70° W.
52.00	Foot of ridge bears N. E. and S. W.; ascend over S. E. slope of ridge.
67.10	Trail bears N. 50° W., and S. 50° E.
110.00	Begin to ascend more rapidly over S. slope of ridge.
120.00	On S. W. slope of ridge about 250 ft. above the 1/4 sec. cor., still ascending.
125.00	Top of mountain about 280 ft. high, bears S. 20° E. and N. 20° W.; thence over top of mountain gradually ascending.
129.00	Commence to descend over N. E. slope of mountain, bears N. W. and S. E.
139.00	Foot of mountain about 125 ft. below the top, bears S. 40° E. and N. 40° W.; ascend over S. W. slope of high mountain.
157.50	Top of mountain about 200 ft. above the foot of same, bears S. 35° E. and N. 35° W.; descend over N. slope of mountain.
162.50	Intersect 7th. Standard Parallel South, 25.73 chs. W. of the standard cor. of secs. 34 and 35, T. 35 S., R. 17 W. which is a granite stone 14x8x6 ins. above ground,

4250
2000

Subdivisions of T.36 S.,R.17 W.-Continued.

Chains.	<p>marked and witnessed as described by the Surveyor General.</p> <p>Set a granite stone 15x10x5 ins., 10 ins. in the ground, for closing cor. of secs. 2 and 3, marked V.C.C. on S., with 2 grooves on E. and 4 grooves on W. faces; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of cor. Pits impracticable.</p> <p>Cor. is on N. slope about 50 ft. below top of mountain. Land slightly rolling on S. 52.00 chs., mountainous and broken ridges on N. 110.50 chs.</p> <p>Soil, clay, gravelly and stony; 2nd., 3rd. and 4th. rate. No timber.</p> <p>Undergrowth of sage with shrubbery and grasses make good grazing.</p> <p>Mountainous land or land covered with dense undergrowth on 142.50 chs.</p> <p>November 17, 1899: At this closing cor., I set off 19° 4' S. on the decl. arc; and, at 11h 45m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 43' N.</p>
	<p>November 17, 1899: I set off 37° 38' N. on the lat. arc; 19° 5' S. on the decl. arc; and, at 2h 45m a.m., l.m.t., determine a true meridian with the solar, at the cor. of secs. 27, 28, 33 and 34, on sectional correction line, heretofore described.</p> <p>Thence I run</p> <p>S., 0° 2' E. on a true line bet. secs. 33 and 34, knowing from previous retracement of S. bdy. of Tp. that a closing cor. will be necessary.</p> <p>Descend over S. slope of ridge.</p> <p>I.00 Bottom of hollow about 50 ft. below the sec. cor., drains NW.; ascend from hollow over N. slope of ridge.</p> <p>6.50 Top of ridge about 75 ft. high, bears N. 25° E. and S. 25° W.; descend over S.E. slope of ridge.</p> <p>10.80 Foot of ridge about 75 ft. below the top bears N. 25° E. and S. 25° W.; ascend over N.W. slope of ridge.</p> <p>18.00 Top of ascent on W. slope of knoll about 150 ft. high,</p>

26

Subdivisions of T.36 S., R.17 W.-Continued.

- Chains. and 25 ft. below top of knoll, which bears E. about 2.00 chs.; descend over W. and S.W. slopes of knoll and ridges.
- 26.00 Foot of ridges about 125 ft. below top of ascent bears S. 10° E. and N. 10° W.; ascend over N.W. slope of ridges.
- 31.00 Top of ridge about 75 ft. high, bears E. and W.; descend over S.W. and S. slopes of ridges.
- 40.00 Set a trachyte stone 12x10x8 ins., 8 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; from which cor.,
A cedar 8 ins. diam., bears S. 69° W., 55 lks. dist., marked
 $1/4$ S., 33, B.T.
A cedar 8 ins. diam., bears S. 48° $1/4^{\circ}$ E., 106 lks. dist., marked
 $1/4$ S., 34, B.T.
- 50.46 Trail bears N. 65° W. and S. 65° E.
- 50.56 Wash at foot of ridge about 125 ft. below top about, about 6 lks. wide and 4 ft. deep, drains W. ascend over N. and N.E. slope of ridge.
- 63.00 Top of ridge about 100 ft. high, bears E. and W.; descend over S.W. slope of ridge.
- 74.70 Foot of ridge and hollow drains to W.; ascend over N.W. slope of ridge.
- 80.16 Intersect S. bdy. of Tp., 1.87 chs., S. $89^{\circ}59'$ E. of the old cor. of secs. 3, 4, 33 and 34, heretofore described in notes of retracement of this bdy.
Set a trachyte stone 16x10x10 ins., 11 ins. in the ground, for closing cor. of secs. 33 and 34, marked C.C. on N., with 3 grooves on E. and W. faces; and raised a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
Pits impracticable. Cor. is on N.W. slope of ridge about 75 ft. above hollow.
I destroy the marks on the old cor. of secs. 3, 4, 33 and 34, which pertain to secs. 33 and 34, and remark same for cor. of secs. 3 and 4, T.37 S., R.17 W., only.
Land mountainous and broken ridges.
Soil, clay, gravelly and stony; 3rd. and 4th. rate.
Timber, medium dense cedars on N. 30.00 chs.; scattering

Subdivisions of T.36 S., R.17 W.-Continued.

Chains. cedars on S. 50.16 chs.

Medium dense sage undergrowth with shrubbery and grasses afford good grazing.

Mountainous land on 80.16 chs.

From the cor. of secs. 27, 28, 33 and 34, on sectional correction line, already described, I run

N. 0° 2' W., bet. secs. 27 and 28.

Ascend over S.W. and S. slopes of ridges; through scattering cedars.

10.00 Leave scattering cedars bears E. and W.

14.00 Top of ridge about 175 ft. above the sec. cor., bears E. and W.; descend over N. slope of ridge.

20.00 Ravine at foot of ridge about 60 ft. below top, 50 lks. wide and 25 ft. deep, drains W.; ascend from ravine over S.E. and S. slopes of high mountain.

35.00 Enter lava beds bears S. 20° E. and N. 20° W.; ascend rapidly over masses of lava stone.

39.00 Leave lava bed bears E. and W.

40.00 Set a volcanic stone 18x10x6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. The cor. is on S. slope of high ridge about 150 ft. above the ravine.

48.00 Top of mountain about 250 ft. high, bears W. and S. 70° E.; descend along top of mountain on E. slope.

69.00 Commence rapid descent over N.E. and N. slopes of high mountain bears S.E. and N.W.

70.00 Enter dense cedars and nut pine timber, bears E. and W.

78.00 Leave dense cedars and pines, bears E. and W.; enter scattering cedars and pines.

— 80.00 Set a trachyte stone 14x12x8 ins., 10 ins. in the ground, for cor. of secs. 21, 22, 27 and 28, marked with 2 notches on S. and 3 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

The cor. is on N.E. slope of high mountain about 125 ft. below top of same.

Subdivisions of T:36 S.,R.17 W.-Continued.

Chains.	Land mountainous and broken. Soil,gravelly and stony;3rd.and 4th.rate. Timber,scattering cedars on S.10.00 chs.;dense and scattering cedars and nut pine on N.10.00 chs. ; scattering juniper trees along the line. Sage undergrowth with shrubbery and grasses afford fair grazing. Mountainous land on 80.00 chs. November 17,1899.
	E.,on a random line bet.secs.22 and 27.
40.00	Set temp.1/4 sec.cor..
80.12	Intersect N.and S.line,2 lks.S.of the cor.of secs. 22,23,26 and 27,heretofore described. Thence I run S.89°59' W.on a true line bet.secs.22 and 27. Ascend along N.slope of ridge.
19.00	About 10.00 chs.S.of line is mountain peak about 300 ft.high,covered with scattering cedars.
21.00	Top of spur on N.slope of ridge,about 75 ft.above the sec.cor.,bears N.and S.;descend over N.W.slope of spur.
25.30	Foot of descent on N.slope of high ridge,about 50 ft. below top of spur,bears N.and S.;thence over spurs and hollows along N.slope of high ridge.
40.06	Set a trachyte stone 15x10x5 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on N.face;and raised a mound of stone,2 ft.base,1 1/2 ft.high N. of cor. Pits impracticable.
53.30	Commence to ascend N.E.slope of high mountain,bears bears N.W.and S.65 ° E.
70.00	On N.slope of high mountain,still ascending.
-80.12	The cor.of secs.21,22,27 and 28. Land mountainous and broken ridges. Soil,gravelly and stony;3rd.and 4th.rate. Timber,scattering cedars on E.20.00 chs.,and scattering cedars and medium.dense cedars and pines on W.22.00 chs.

Subdivisions of T.36 S., R.17 W., -Continued.

Chains.	Medium dense sage undergrowth with shrubbery and grasses afford fair grazing. Mountainous land on 80.12 chs.
	N.002' W., bet. secs. 21 and 22; descending rapidly over N.E. and N. slope of high ridge or mountain; through medium dense cedars and nut pine timber.
14.00	Leave cedars and pines bears E. and W.
26.00	N. foot of ridge about 200 ft. below the sec. cor., bears S. 75° W. and N. 75° E.; thence over broken foot hills and ridges still descending.
40.00	Set a trachyte stone 15x10x8 ins., 10 ins. in the ground, for 1/4 sec. cor. marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
69.70	Foot of descent about 75 ft. below the 1/4 sec. cor., bears E. and W.; ascend over S. slope of ridge.
75.50	Top of ridge about 50 ft. high, bears S.E. and N.W.; descend over N.E. slope of ridge.
80.00	Set a lava stone 18x12x5 ins., 12 ins. in the ground, for cor. of secs. 15, 16, 21 and 22, marked 36 S. on N.E., and 17 W. on S.E. faces, with 3 notches on S. and E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Cor. on N.E. slope of ridge about 40 ft. below top of ridge. Land mountainous and broken ridges. Soil, stony and gravelly; 4th. and 3rd. rate. Timber, cedars and nut pines, scattering and medium dense, on S. 14.00 chs. Mountainous land on 80.00 chs.
	N. 89° 59' E. on a random line bet. secs. 15 and 22.
40.00	Set temp. 1/4 sec. cor.
80.20	Intersect N. and S. line, 2 lks. S. of the cor. of secs. 14, 15, 22 and 23, heretofore described. Thence I run

Subdivisions of T.36 S., R.17 W.-Continued.

- Chains. S. $89^{\circ}58'$ W. on a true line bet. secs. 15 and 22.
Ascend gradually over nearly level narrow valley;
through dense sage undergrowth.
- 10.35 Wash about 20 lks. wide and 4 ft. deep, drains N. 80° E.;
leave dense sage undergrowth bears N. and S.; enter
scattering sage.
- 28.45 Wash about 12 lks. wide and 4 ft. deep, drains N. 70° E.
- 30.10 Road from St. George to Modena, bears S. 70° E. and N.
 70° W.
- 31.20 Trail bears S. 70° E. and N. 70° W.
- 37.10 Trail bears S. 65° E. and N. 65° W.
- 40.10 Set a volcanic stone 18x12x5 ins., 12 ins. in the
ground, for $1/4$ sec. cor., marked $1/4$ on N. face; dug
pits 18x18x12 ins., E. and W. of stone, 3 ft. dist.; and
raised a mound of earth 3 $1/2$ ft. base, 1 $1/2$ ft. high,
N. of cor. Point of volcanic bluff on N. side of
narrow valley, about 50 ft. high, bears N. about 7.00
chs. dist from the $1/4$ sec. cor.
- 40.85 Wash about 20 lks. wide and 3 ft. deep, drains S. 65° E.
- 56.35 Trail bears N. 75° E. and S. 75° W.
- 60.40 Trail bears N. 85° E. and S. 85° W.
- 62.60 Leave level land bears S. E. and N. W.; begin ascent of
broken ridges on W. side of narrow valley or canon.
- 80.20 The cor. of secs. 15, 16, 21 and 22.
Land mostly level sloping S. E., with broken ridges
on W. 17.60 chs.
Soil in the valley or canon clay and gravelly with
more gravel on the ridges; 2nd. and 3rd. rate.
No timber.
Undergrowth, shrubbery and grasses afford fair grazing.
Mountainous land or land covered with dense under-
growth on 27.95 chs.

27.95
22.25

November 18, 1899: At this cor. of secs. 15, 16, 21 and
22, I set off $19^{\circ}18'$ S. on the decl. arc; and, at 11^h
45' a.m., l.m.t., observe the sun on the meridian; the
resulting lat. is $37^{\circ}40'$ N.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains

- N.00 2' W. bet. secs. 15 and 16.
Descend over E. and N.E. slope of broken ridges.
- 19.00 Foot of ridges about 75 ft. below the sec. cor., bears N.80° W.; and S.80° E.; thence over nearly level ground sloping Easterly.
- 23.40 Road from St. George to Modena, bears S.40° E. and N.50° W.
- 25.20 Trail bears S.75° E. and N.75° W.
- 34.40 Wash 25 lks. wide and .4 ft. deep, drains E. about 1.00 ch., thence S.30° E.
- 34.50 Trail bears S.30° E. and N.30° W.; begin ascent of broken ridges bears S.30° E. and N.30° W.; leave narrow valley or canon.
- 40.00 Set a volcanic stone 20x12x3 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Cor. is on W. slope of ridges about 75 ft. above foot of same.
- 78.00 Top of ridge about 125 ft. above the 1/4 sec. cor., bears S.35° E. and N.35° W.; thence over rolling top of ridge.
- 80.00 Set a trachyte stone 15x15x4 ins., 10 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, marked with 4 notches on S. and 3 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
- Land, mostly mountainous and broken ridges; narrow valley or canon nearly level.
- Soil, clay, gravelly and stony; 2nd. and 3rd. rate.
- No timber.
- Scattering sage undergrowth on S. 62.00 chs.; dense sage on N. 18.00 chs.; which with shrubbery and grasses afford good grazing.
- Mountainous land on 64.50 chs.

Subdivisions of T.36 S., R.17 W.-Continued.

- Chains. N., $89^{\circ}58'$ E. on a random line bet. secs. 10 and 15.
- 40.00 Set temp. $1/4$ sec. cor.
- 80.08 Intersect N. and S. line, 21 lks. S. of the cor. of secs. 10, 11, 14 and 15, heretofore described.
- November 18, 1899: At this sec. cor., I set off 370 $40' 30''$ N. on the lat. arc; $19^{\circ}19'$ S. on the decl. arc; and at 3^h45^m p.m. l.m.t., determine a true meridian with the solar; thence I run S. $89^{\circ}49'$ W. on a true line bet. secs. 10 and 15.
- Descend over W. and N.W. slopes of ridges, through dense sage undergrowth.
- 14.05 About 3.00 chs. N. of line is a prospect pit and monument, with slight traces of silver and copper ores.
- 40.04 Set a porphyry stone 16x12x5 ins., 11 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, N. of cor. Pits impracticable. Corner on W. slope of ridge about 100 ft. below the sec. cor.
- Foot of descent about 25 ft. below the $1/4$ sec. cor.,
- 50.80 ^{Gulch} drains S.; trail bears N. and S.
- 51.55 Begin ascent of ridge bears N. and S.
- 80.08 The cor. of secs. 9, 10, 15 and 16., on top of ridge about 50 ft. above E. foot of same.
- Land mountainous and broken ridges.
- Soil, clay, gravelly and stony; 2nd., 3rd. and 4th. rate.
- No timber.
- Dense sage with thick shrubbery and grasses afford good grazing.
- Mountainous land on 80.08 chs.

November 18, 1899.

November 20, 1899: I set off 370 $41'$ N. on the lat. arc; $19^{\circ}43'$ S. on the decl. arc; and, at 8^h46^m a.m., l.m.t., determine with the solar a true meridian, at the cor. of secs. 9, 10, 15 and 16, heretofore described.

Thence I run N., $00^{\circ}2'$ W. over top of ridge; through dense sage undergrowth. *Ref. Secs. 9 and 10.*

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.

- 14.00 Commence to descend over N.E.slope of ridges bears N.W.and S.E.
- 22.00 Foot of descent about 60 ft.below top of ridge,bears E.and W.;ascend over S.slope of ridge.
- 27.50 Top of ridge about 50 ft.high,bears E.and W.;descend over N.E.slope.
- 40.00 Set a trachyte stone 18x10x6 ins.,12 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on W.face;dug pits 18x18x12 ins.,N.and S.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, W.of cor. Cor.is on N.E.slope of ridge about 30 ft. below top of last ridge.
- 44.00 Foot of descent about 15 ft.below the 1/4 sec.cor., drains to the S.E.;ascend over S.W.slope of ridge.
- 45.28 Old road bears N.75° E.and S.75° W.
- 53.00 Top of ridge about 50 ft.high,bears N.30° W.and S. 30° E.;descend along N.E.slope of ridge.
- 62.50 Foot of descent about 30 ft.below top of last ridge drains to S.E.;ascend over S.W.slope of high ridge.
- 80.00 Set a porphyry stone 15x8x6 ins.,10 ins.in the ground for cor.of secs.3,4,9 and 10,marked with 5 notches on S.and 3 notches on E.edges;dug pits 18x18x12 ins.,in each sec.,5 1/2 ft.dist.;and raised a mound of earth 4 ft.base,2 ft.high,W.of cor.
- This cor.is on top of ridge about 75 ft.above foot of same.Ridge bears S.E.and N.W.
- Land mountainous and broken ridges.
- Soil,clay and gravelly,and slightly stony;2nd.and 3rd rate.
- No timber:
- Dense undergrowth of sage with shrubbery and grasses afford good grazing:
- Mountainous land on 80.00 chs.

37

Subdivisions of T.36 S., R.17 W.-Continued.

Chains. N.89°49' E.on a random line bet.secs.3 and 10.
 40.00 Set temp.1/4 sec.cor.
 80.12 Intersect N.and S.line,18 lks.N.of the cor.of secs.
 2,3,10 and 11,heretofore described.
 Thence I run
 S.89°57' W.on a true line bet.secs.3 and 10.
 Along N.E.slope of ridges;through dense sage under-
 growth.
 6.88 Old road bears N.70° E.and S.70° W.
 16.00 Road bears N.65° E.and S.65° W.
 26.00 Begin ascent over S.E.slope of ridge,bears S.30° W.
 and N.30° E.
 35.00 Top of ridge about 50 ft.high,bears N.and S.40° W.;
 descend over S.W.slope of ridge.
 40.06 Set a lava stone 18x18x6 ins.,12 ins.in the ground,
 for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x
 18x12 ins.,E.and W.of stone,3 ft.dist.;and raised a
 mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
 This cor.is at foot of descent about 40 ft.below top
 of last ridge. Ascend.
 42.50 Top of ridge about 40 ft. above the 1/4 sec.cor.;
 bears N.40° W.and S.40° E.;thence over hollows and
 low ridges over top of main ridge.
 66.00 Main hollow about 1.50 ch.wide and 50 ft.deep,drains
 S.20° E.in a winding course across the sec.
 80.12 The cor.of secs. 3,4,9 and 10.
 Land mountainous and broken ridges.
 Soil,clay and gravelly,with streaks of stony ground;
 2nd.,3rd.,and 4th.rate.
 No timber.
 Dense sage undergrowth and shrubbery and grasses
 afford good grazing.
 Mountainous land on 80.12 chs.

From the cor.of secs.3,4,9 and 10,already de-
 scribed,I run
 N.0° 2' W.,on a true line bet.secs. 3 and 4,knowing
 that a closing cor.will be necessary on N.bdy.of Tp.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	Ascend over main ridge crossing small hollows and low ridges, with general course of drainage to S.E.
13.30	Trail bears S.E. and N.W.
40.00	Set a porphyry stone 16x10x5 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor. This cor. is on S.E. slope of main ridge, about 60 ft. above the sec. cor. November 20, 1899: At this 1/4 sec. cor., I set off 19° 46' S. on the decl. arc; and, at 11h 46m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37° 41' " N.
50.00	A knoll about 250 ft. ^{high} and 20.00 chs. diam. at base, bears N. 52° E., about 35.00 chs. dist. from this point.
56.00	Top of ascent on high ridge about 75 ft. above the 1/4 sec. cor., bears S.E. and N.W.; descend over N.E. slope of ridges.
73.28	Trail bears N. 50° W. and S. 50° E.
77.33	Trail bears E. and W.
77.75	N. foot of ridge about 125 ft. below top, bears S. 65° E. and N. 65° W., with course of drainage to S. 65° E.; ascend over S. slope of ridge.
100.00	Top of first ascent about 150 ft. high, bears E. and W.;
116.00	On S.W. slope of ridge, still ascending.
134.00	On W. slope of ridge, still ascending.
143.00	Top of ascent on W. slope of high mountain about 350 ft. high, and 40 ft. below top of mountain, bears N. 25° E. and S. 25° W. descend gradually over N.W. slope of mountain.
155.00	Commence rapid descent over N. slope of mountain.
162.00	Ravine at N. foot of mountain, about 50 lks. wide and 10 ft. deep, about 100 ft. below top of mountain, drains N. 80° W.; ascend from ravine over S. slope of high ridge.
162.63	Intersect 7th. Standard Parallel South, 26.35 chs. W. of the standard cor. of secs. 33 and 34, which is a volcanic stone 20x12x8 ins., 12 ins. deep in a mound of stone, marked and witnessed as described by the Surveyor General.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains. Set a trachyte stone 18x12x8 ins., 12 ins. in the ground, for closing cor. of secs. 3 and 4, marked C.C. on S., with 3 grooves on E. and W. faces; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of cor. Pits impracticable.

Land mountainous and broken.

Soil, clay, gravelly and stony; 2nd., 3rd. and 4th. rate. No timber.

Sage undergrowth with shrubbery and grasses afford good grazing.

Mountainous land on 162.63 chs.

At the cor. of secs. 28, 29, 32 and 33, on Sectional Correction Line, heretofore described, I run S. 0° 3' E. on a true line bet. secs. 32 and 33, knowing from previous retracement of S. bdy. of Tp. that a closing cor. will be necessary.

Descend along E. slope of ridges.

- 8.65 Hollow about 50 lks. wide and 20 ft. deep, drains S. 80° E.; ascend from hollow over N.W. slope of ridge.
- 17.68 Top of ridge about 75 ft. above the hollow, bears E. and W.; thence over top of ridges.
- 20.70 Commence to descend over S. slope of ridges, bears W. and S. 35° E.
- 34.70 S. foot of ridges about 75 ft. below top of same bears S. 80° W. and S. 25° E.; ascend over broken foot hills and ridges with general course of drainage to S.E.
- 40.00 Set a trachyte stone 12x12x8 ins., 8 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.
- 42.00 Wash 15 lks. wide and 4 ft. deep, drains E. about 1.00 ch., thence S.E.
- 57.68 Begin ascent of high mountain, bears N. 80° E. and S. 80° W.; leave foot hills and ridges.
- 79.68 Intersect S. bdy. of Tp., 2.27 chs., dist., S. 89° 51' E. from the old cor. of secs. 4, 5, 32 and 33, heretofore

Subdivisions of T.36 S., R.17 W.-Continued.

Chains. described in Notes of retracement of this bdy.
Set a trachyte stone 14x12x8 ins., 10 ins. in the ground, for closing cor. of secs. 32 and 33, marked C.C. on N., with 4 grooves on E. and 2 grooves on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. This cor. is on N.E. slope of high mountain about 100 ft. above foot of same.
Land mountainous and broken ridges.
Soil, clay, gravelly and stony; 3rd. and 4th. rate.
Timber, scattering cedars on S. 30.00. chs.
Sage undergrowth, shrubbery and grasses in sufficient quantity to make good grazing.
Mountainous land on 79.68 chs.

November 20, 1899.

November 21, 1899: I set off 37° 38' N. on the lat. arc; 19° 58' S. on the decl. arc; and, at 9h 46^m a.m., l.m.t., determine a true meridian with the solar, at the cor. of secs. 28, 29, 32 and 33, on sectional correction line, heretofore described.

Thence I run

N. 0° 3' W., bet. secs. 28 and 29.

Ascend over broken ridges and hollows with general course of drainage to S.E.

2.35 Wood road and road from Enterprise to Modena bears S. 30° E. and N. 35° W.

34.00 Top of ascent about 100 ft. above the sec. cor., bears S. 50° W. and N. 50° E.; descend.

40.00 Set a trachyte stone 14x10x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.

41.40 Hollow about 50 lks. wide and 25 ft. deep, drains W.; ascend from hollow.

47.40 Top of ridge about 50 ft. high, bears N. 70° W. and S. 70° E.; descend.

57.20 Hollow at foot of ridges, about 50 ft. below top of

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	last ridge, about 50 lks. wide and 25 ft. deep, drains S. 80° W.; ascend from hollow along W. slope of high ridge.
80.00	Set a trachyte stone 12x10x6 ins., 8 ins. in the ground for cor. of secs. 20, 21, 28 and 29, marked with 2 notches on S. and 4 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Corner is on W. slope of ridge about 75 ft. above last hollow. Land mountainous and broken ridges. Soil, gravelly and stony; 3rd. and 4th. rate. Timber, scattering juniper on S. 1/2 mile. Dense sage undergrowth with shrubbery and grasses afford fair grazing. Mountainous land on 80.00 chs.
	E., on a random line bet. secs. 21 and 28.
40.00	Set temp. 1/4 sec. cor.
80.06	Intersect N. and S. line, 8 lks. S. of the cor. of secs. 21, 22, 27 and 28, heretofore described. Thence I run S. $89^{\circ}57'$ W., on a true line bet. secs. 21 and 28. Ascend over N. slope of ridge.
3.00	Top of ascent, about 30 ft. above the sec. cor., bears N. and S.; descend over N.W. slope of ridge.
40.03	Set a trachyte stone 14x12x4 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. Cor. is on N.W. slope of high mountain or ridge, about 200 ft. below top of ridge.
45.00	N.W. foot of mountain about 50 ft. below the 1/4 sec. corner, bears N. 30° E. descending, and S. 30° W., ascending; ascend over E. slope of ridge.
68.00	Top of ridge about 125 ft. above foot of same, bears N. 10° W. and S. 10° E.; descend over W. slope.
80.06	The cor. of secs. 20, 21, 28 and 29, on W. slope about 80 ft. below top of ridge.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains. Land mountainous and broken.

Soil, gravelly and stony; 4th. rate.

Timber, scattering cedars and juniper on E. 70.00 chs.

Undergrowth of sage, shrubbery and grasses afford fair grazing.

Mountainous land on 80.06 chs.

November 21, 1899: At this sec. cor., I set off $19^{\circ} 59'$ S. on the decl. arc; and, at $11^{\text{h}} 46^{\text{m}}$ a.m., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ} 39'$ " N.

N. $0^{\circ} 3'$ W., bet. secs. 20 and 21.

Ascend over W. and S.W. slopes of ridges.

3.10 Top of spur on W. slope about 50 ft. above the sec. cor. bears E. and W.; descend.

5.80 Hollow about 40 ft. below top of spur, about 50 lks. wide and 25 ft. deep, drains S. 70° W.; ascend from hollow over S.W. slope of ridge.

21.50 Top of ridge about 100 ft. above the hollow, bears N. 50° W. and S. 50° E.; descend over N. slope of ridge, very rocky and broken.

40.00 Set a trachyte stone $15 \times 12 \times 6$ ins., 10 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable; Cor. in on N. slope of ridge, about 150 ft. below top of ridge.

57.80 N. foot of ridge or mountain, about 150 ft. below the $1/4$ sec. cor., bears N. 60° W. and S. 60° E.; thence over broken ridges and foot hills, still descending.

74.00 Leave ridges and foot hills bears S.E. and N.W.; thence over nearly level valley, still descending.

80.00 Set a lava stone $20 \times 14 \times 6$ ins., 15 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, marked with 3 notches on S. and 4 notches on E. edges; dug pits $18 \times 18 \times 12$ ins. in each sec., $5\frac{1}{2}$ ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land mostly mountainous and broken ridges with narrow valley on N.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains. Soil, stony, gravelly and clay loam; 4th., 3rd., and 2nd. rate.
 Timber, scattering cedars and juniper on N. 57.00 chs.
 Medium dense undergrowth of sage with shrubbery and grasses afford good grazing.
 Mountainous land on 74.00 chs.

- N. 89° 57' E. on a random line bet. secs. 16 and 21.
 40.00 Set temp. 1/4 sec. cor.
 80.12 Intersect N. and S. line 5 lks. S. of the cor. of secs. 15, 16, 21 and 22, heretofore described.
 Thence I run
 S. 89° 55' W. on a true line bet. secs. 16 and 21.
 Ascend over N. E. slope of ridges; through dense sage undergrowth.
 11.40 Top of ridge about 40 ft. high, bears N. and S.; descend over S. W. slope of ridges.
 24.40 Foot of descent about 50 ft. below top of last ridge, bears N. and S.; ascend over E. slope of ridge.
 30.40 Top of ridge about 40 ft. high, bears N. 30° E. and S. 30° W.; descend over N. W. slope of ridges.
 40.06 Set a lava stone 16x10x6 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.
 Pits impracticable. Cor. is on N. W. slope about 30 ft. below top of last ridge.
 46.00 Foot of ridges about 30 ft. below the 1/4 sec. cor., and enter narrow valley bears N. 20° E. and S. 20° W. Trail bears N. and S.; thence over nearly level and slightly rolling land, gradually ascending.
 80.12 The cor. of secs. 16, 17, 20 and 21.
 Land partly mountainous and broken ridges and partly nearly level and slightly rolling.
 Soil, clay and gravelly; 2nd. and 3rd. rate.
 No timber.
 Dense sage undergrowth with shrubbery and grasses which afford fair grazing.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	Mountainous land or land covered with dense undergrowth on 80.12 chs.
	N., 0° 3' W., bet. secs. 16 and 17. Over nearly level land; through dense sage undergrowth.
9.00	Enter low broken ridges on N. side of narrow valley, bears N. 75° E. and S. 75° W.; ascend.
39.00	Top of ascent of ridges about 100 ft. above the sec. cor., bears N. 60° E. and S. 60° W.; descend over broken ridges and hollows, with course of drainage to E. and N.E.
40.00	Set a trachyte stone, 16x10x8 ins., 11 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
48.60	Wash at N. foot of ridges about 50 ft. below the 1/4 sec. cor., 20 lks. wide and 5 ft. deep, drains N. 50° E.; foot of ridges bears S. 60° E. and N. 60° W.; thence over slightly rolling ground.
49.05	Trail bears S. 70° W. and N. 70° E.; leave dense sage undergrowth, bears S. 70° W. and N. 70° E.; enter in scattering sage.
51.95	Old road bears N.E. and S.W.
56.60	Old road bears N. 50° E. and S. 50° W.
60.75	Enter dense sage undergrowth bears E. and W.; leave scattering sage.
71.65	Old road bears N. 50° E. and S. 50° W.
80.00	Set a trachyte stone 14x10x6 ins., 10 ins. in the ground, for cor. of secs. 8, 9, 16 and 17, marked with 4 notches on S. and E. edges; dug pits 18x18x12 ins., in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land partly mountainous and broken ridges and partly nearly level and rolling land. Soil, clay loam and gravelly and on ridges slightly stony; 2nd, 3rd, and 4th, rate. No timber.

69.30
71.70

Subdivisions of T.36 S., R.17 W.-Continued.

Chains. Undergrowth, shrubbery and grasses afford fair grazing.

Mountainous land or land covered with dense undergrowth on 68.36 chs.

November 21, 1899.

N 89° 55'

E., on a random line bet. secs. 9 and 16.

40.00 Set temp. 1/4 sec. cor.

80.18 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 9, 10, 15 and 16, heretofore described.

Thence I run

S. 89° 57' W. on a true line bet. secs. 9 and 16.

Descend over N.W. slope of ridges; through medium dense sage undergrowth.

12.20 Foot of ridges about 75 ft. below the sec. cor., bears N. 40° E. and S. 40° W.; thence over slightly rolling ground, along the foot of S. slope of ridges.

Enter dense sage undergrowth bears N.E. and S.W.; leave medium dense sage.

34.80 Trail bears N. 100° W. and S. 100° E.

38.20 Wash about 15 lks. wide and 2 ft. deep, drains S.

40.09 Set a trachyte stone 15x15x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; dug pits 18x18x12 ins., E. and W. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

44.60 Trail bears N. 50° E. and S. 50° W.

60.20 Wash about 25 lks. wide and 4 ft. deep, drains S. 60° E.

68.10 Old road bears S.W. and N.E.

71.10 Road from St. George to Modena bears S.E. and N.W.

73.40 Trail bears N. 35° W. and S. 35° E.

80.18 The cor. of secs. 8, 9, 16 and 17.

Land, E. 12.20 chs. mountainous and broken ridges ;
W. 67.98 chs. slightly rolling with ridges on N. of line

Subdivisions of T.36 S., R.17 W.-Continued.

Chains	<p>Soil on ridges gravelly and stony; along the foot of ridges in narrow valley or cañon the soil is rich clay loam, slightly gravelly; 4th, 3rd, and 2nd rate. No timber.</p> <p>Sage undergrowth with shrubbery and grasses in abundance afford good grazing.</p> <p>Mountainous land or land covered with dense undergrowth on 80.18 chs.</p>
	<p>N., 0°3' W., bet. secs. 8 and 9; gradually ascending over slightly rolling ground; through dense sage undergrowth</p>
6.60	Trail bears N. 65° W. and S. 65° E.
8.68	Road from St. George to Modena, bears S. E. and N. W.
9.90	Wash about 10 lks. wide and 4 ft. deep, drains S. 80° E. about 1.00 ch., thence S. 25° E.
11.93	Trail bears S. E. and N. W.
16.00	Enter hollow about 15 ft. deep, drains S. 15° E.
24.00	Leave hollow and begin ascent over S. W. slope of ridges, bears S. 20° E. and N. 20° W.
40.00	Set a trachyte stone 14x12x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. The cor. is on S. W. slope of ridge about 60 ft. above the hollow.
58.00	Top of ridges about 50 ft. above the 1/4 sec. cor., bears N. 40° E. and S. 40° W.; descend over N. W. slope of ridges.
75.00	Foot of descent about 40 ft. below top of ridge, bears N. W. and S. E.; ascend along W. slope of ridges.
80.00	Set a porphyry stone 14x8x6 ins., 10 ins. in the ground for cor. of secs. 4, 5, 8 and 9, marked with 5 notches on S. and 4 notches on E. edges; dug pits 18x18x12 ins., in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains. Land on S.24.00 chs.rolling ;N.56.00 chs.,mountainous and broken ridges.

Soil,clay and gravelly;2nd.and 3rd.rate.

No timber.

Sage undergrowth,shrubby and grasses in abundance and make good grazing.

Mountainous land or land covered with dense undergrowth on 80.00 chs.

N.,89°57' E.on a random line bet.secs.4 and 9.

40.00 Set temp.1/4 sec.cor.

80.26 Intersect N.and S.line 39 lks.N.of the cor.of secs. 3,4,9 and 10,heretofore described.

November 22,1899:At this sec.cor.,I set off 200
12' S.on the decl.arc;and,at 11h46^m,a.m.,l.m.t.,
observe the sun on the meridian;the resulting lat.
is 37°41'20" N.

Thence I run

N.89°46' W.,on a true line bet.secs.4 and 9.

Over ridges and hollows with course of drainage to
S.E.and S.;through dense sage undergrowth.

40.13 Set a porphyry stone 16x10x6 ins.,11 ins.in the
ground,for 1/4 sec.cor.,marked 1/4 on N.face;and
raised a mound of stone,2 ft.base,1 1/2 ft.high,N.of
cor. Pits impracticable. This cor.is on top of ridge,
about 25 ft.below the sec.cor.

Continue over ridges and hollows to top of main ridge.

73.00 Top of ridge about 60 ft.above the 1/4 sec.cor.,
bears N.30° E.and S.30° W.;descend over W.slope of
ridge.

80.26 The cor.of secs.4,5,8 and 9,on W.slope about 25 ft.
below top of ridge.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains	Land mountainous and broken ridges. Soil, clay and gravelly; 2nd. and 3rd. rate. No timber. Undergrowth of sage with shrubbery and grasses in abundance afford fair grazing. Mountainous land on 80.26 chs.
	<p>November 22, 1899: I set off $37^{\circ}42'$ N. on the lat. arc; $200^{\circ}13'30''$ S. on the decl. arc; and, at 2^h46^m p.m., l.m.t., determine a true meridian with the solar, at the cor. of secs. 4, 5, 8 and 9, heretofore described.</p> <p>thence run</p> <p>$N.0^{\circ}3'$ W. on a true line bet. secs. 4 and 5, knowing that a closing cor. will be necessary on N. bdy. of Tp. Gradually ascend along W. slope of ridge; through dense sage undergrowth.</p>
18.00	Top of ascent on W. slope of ridge, about 50 ft. above the sec. cor., bears E. and W.; descend over W. slope of ridge.
34.00	On N.W. slope of ridge descending . .
40.00	Set a lava stone $16 \times 16 \times 5$ ins., 11 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone, 2 ft. base, $1\ 1/2$ ft. high, W. of cor. Pits impracticable. Cor. is on N.W. slope about 50 ft. below top of ridge.
45.00	Foot of descent on N.W. slope of ridge, about 25 ft. below the $1/4$ sec. cor., drains $S.80^{\circ}W.$ about 10.00 chs., thence S.; ascend.
58.00	Top of ridge about 50 ft. above foot of descent, bears $S.40^{\circ}W.$ and $N.40^{\circ}E.$; descend more gradually over N.W. slope of ridges.
66.80	Trail bears $S.80^{\circ}W.$ and $N.80^{\circ}E.$; foot of descent about 40 ft. below top of last ridge, drains $S.65^{\circ}W.$; ascend over S.E. slope of ridge.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.

- 75.00 Top of ridge about 50 ft. high, bears N. 70° E. and S. 70° W.; descend over N.W. slope of ridges.
- 87.00 Foot of ridge about 40 ft. below the top, bears E., and W. about 2.00 chs.; thence N.; descend along hollow bet. two ridges.
- 107.50 Leave hollow, which drains N. 40° W.
- 108.30 Trail bears N. 40° W. and S. 30° E.
- 109.10 Wash at foot of descent about 25 lks. wide and 4 ft. deep, drains W. into hollow.
Commence gradual ascent over S. slope of high ridges.
- 110.17 Trail bears N. 50° W. and S. 50° E.
- 115.16 Trail bears S.E. and N.W.; leave dense sage undergrowth and enter scattering sage, bears S.E. and N.W.
- 130.50 Top of mountain about 150 ft. high, bears S. 40° E. and N. 60° W.; descend over N.W. slope.
- 141.00 N. foot of ridge about 110 ft. below top of same, bears N. 60° W., descending, and rises S. 60° E.; ascend rapidly over S.W. slope of high mountain.
- 151.00 Top of mountain about 125 ft. high, bears E. and S. 80° W.; descend over N.W. slope of mountain.
- 157.00 Bottom of hollow and foot of descent about 50 ft. below the top of mountain, drains S. 75° W.
Ascend over S.E. slope of mountain.
- 161.93 Intersect the 7th. Standard Parallel South, 26.87 chs. W. of the old standard cor. of secs. 32 and 33, T.35 S., R.17 W., which is a granite stone 10x9x10 ins. above ground, marked and witnessed as described by the Surveyor General.
Set a lava stone 18x10x5 ins., 12 ins. in the ground, for closing cor. of secs. 4 and 5, marked C.C. on S., with 4 grooves on E. and 2 grooves on W. faces; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high S. of cor. Pits impracticable.
Cor. is on S.E. slope of mountain about 60 ft. above bottom of last hollow.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	Land mountainous and broken. Soil, clay, gravelly and stony; 2nd. 3rd. and 4th. rate. No timber. Sage undergrowth with shrubbery and grasses afford good grazing. Mountainous land on 161.93 chs.. November 22, 1899.
	<p>November 23, 1899: I set off 370³⁸' N. on the lat. arc; 20° 20' S. on the decl. arc; and, at 7^h 47^m a.m., l.m.t., determine a true meridian with the solar, at the cor. of secs. 29, 30, 31 and 32, on Sectional Correction Line, heretofore described.</p> <p>Thence I run S., 0° 3' E., on a true line bet. secs. 31 and 32, knowing from previous retracement of S. bdy. of Tp. that a closing cor. will be necessary.</p> <p>Ascend over N.W. slope of ridges.</p> <p>7.50 Top of ridge about 50 ft. above the sec. cor., bears S. 80° E. and N. 80° W.; descend over S.W. slope of ridge.</p> <p>27.50 S. foot of ridges, about 50 ft. below top of same, bears N. 65° W. and S. 65° E.; thence over rolling narrow valley.</p> <p>29.25 Trail bears S.E. and N.W.</p> <p>33.80 Wash about 10 lks. wide and 4 ft. deep, drains E.; ascend from wash.</p> <p>40.00 Set a trachyte stone 14x10x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; dug pits 18x18x12 ins., N. and S. of stone, 3 ft. dist.; and raised a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.</p> <p>59.35 Trail bears N. 50° W. and S. 50° E.</p> <p>67.52 Foot of mountain on S. side of valley, bears E. and W.; ascend over N.W. and N. slopes of mountain.</p>

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.

79.52 Intersect S.bdy.of the Tp.,4.00 chs.,S.89°08' E.of
 the old cor.of secs.5,6,31 and 32,heretofore descri-
 bed in the notes of retracement of this bdy.

Set a granite stone 14x10x6 ins.,10 ins.in the
 ground,for closing cor.of secs.,31 and 32,marked C.
 C.on N.with 5 grooves on E.and 1 groove on W.faces;
 and raised a mound of stone,2 ft.base,1 1/2 ft.high,
 N.of cor. Pits impracticable. Cor.is on N.W.slope of
 high ridge or mountain,about 75 ft.above foot of
 ridges.

I destroy the marks on the old cor.of secs.5,6,31
 and 32 that pertain to secs.31 and 32,and remark the
 same for cor.of secs.5 and 6,T.37 S.,R.17 W.,only.

Land partly mountainous and broken and partly roll-
 ing valley.

Soil,on the ridges,gravelly and stony;and clay-grav-
 elly in the valley;4th.,3rd.and 2nd.rate.

Timber,scattering cedars on S.34.50 chs.,and juni-
 per on N.8.00 chs.

Medium dense sage undergrowth with shrubbery and
 grasses afford good grazing.

Mountainous land on 39.50 chs.

From the cor.of secs.29,30,31 and 32,heretofore
 described,(On sectional correction line),I run
 N.0° 3' W.,bet.secs.29 and 30.

Descend over N.W.slope of ridges.

10.55 Road from Hebron to Modena at foot of ridges,about
 60 ft.below the sec.cor.,follows course of ridges,
 S.50° W.and N.50° E.-course of drainage N.50° E.

11.00 Begin ascent of ridges,bears N.55° E.and S.55° W.

25.50 Top of ascent of ridges about 125 ft.above the road
 bears S.75° W.and N.75° E.;descend over N.slope of

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.

- 40.00 Set a trachyte stone 14x8x6 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raised a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Cor. is on N. slope of ridge, about 100 ft. below top of ridge.
- 45.00 Bottom of hollow and foot of ridges about 25 ft. below the $\frac{1}{4}$ sec. cor., drains with course of ridges S. 75° E.; ascend over S.W. slope.
- 52.00 Top of ascent of ridges about 75 ft. above last hollow bears S. 60° W. and N. 60° E.; descend over N.W. slope of ridges.
- 66.00 Foot of descent, about 150 ft. below top of last ridges, bears E. and W., with drainage to E.; descend over broken ridges, along N.E. and E. slopes.
- 80.00 Set a trachyte stone 14x10x10 ins., 10 ins. in the ground, for cor. of secs. 19, 20, 29 and 30, marked with 2 notches on S. and 5 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. The cor. is near foot of S.E. slope of ridges, about 75 ft. below foot of last descent. Land mountainous and broken ridges. Soil, clay, gravelly and stony; 3rd. and 4th. rate. No timber, except scattering juniper on S. 51.00 chs. Medium dense sage undergrowth with shrubbery and grasses afford good grazing. Mountainous land on 80.00 chs.

E., on a random line bet. secs. 20 and 29.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.

- 80.14 Intersect N. and S. line 21 lks. N. of the cor. of sec. 20, 21, 28 and 29, heretofore described.

Thence I run

N. $89^{\circ}51'$ W. on a true line bet. secs. 20 and 29.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains	Descend over W.slope of rocky ridge.
17.85	West foot of ridge about 80 ft.below the sec.cor., bears N.40° E.and S.40° W.;ascend over S.E.slope of knoll.
22.35	Top of ascent on S.slope of knoll,about 25 ft.above foot of knoll;top of knoll about 200 ft.high,bears N.about 20.00 chs;this knoll joins range of mountains on E. Descend over S.W.slope of knoll.
37.00	S.W.foot of knoll,bears N.70° W.and S.70° E.;thence over rolling ground.
40.07	Set a trachyte stone 12x10x5 ins.,8 ins.in the ground for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high,N.of cor.
40.55	Trail bears N.60° W.and S.60° E.
41.20	Road from Hebron and Enterprise to Modena bears S.E. and N.W.
43.95	Trail bears N.40° W.and S.40° E.
47.00	Road from Hebron to Modena,bears S.100 E.,and N.100 W.,and joins main road at about 10.00 chs.dist.
48.00	Begin ascent of ridges and foot hills,bears N.W.and S.E.;leave rolling land.
69.14	The cor.of secs.19,20,29 and 30,at foot of S.E. slope of high ridges,about 50 ft.above beginning of ascent of foot hills and ridges.
69.14 11.00	Land partly mountainous and broken ridges and partly rolling. Soil,gravelly,clay loam and gravelly,and stony;3rd. 2nd.and 4th.rate. No timber. Undergrowth of sage,medium dense,with shrubbery and grasses,which afford good grazing. Mountainous land on 69.14 chs.

November 23,1899:At this cor.of secs.19,20,29 and 30,I set off 200²/₄' 30" S.on the decl.arc;and at

Subdivisions of T.36 S.-R.17 W.-Continued.

Chains. 11^h 47^m a.m., l.m.t., observe the sun on the meridian;
the resulting lat. is 37° 39' [✓] N.

W., on a random line bet. secs. 19 and 30.

40.00 Set temp. 1/4 sec. cor.

84.96 Intersect W. bdy. of Tp., 3⁷/₇ lks. N. of the old cor. of
secs. 19, 24, 25 and 30, which is a cobble stone 14x10x
5 ins. above ground, marked and witnessed as described
by the Surveyor General.

N. 89° 45' [✓] E. on a true line bet. secs. 19 and 30.

Descend over E. slope of low ridges and foot hills.

13.80 Old wood road from Hebron to the wood hills, bears S.
and N.

17.70 E. foot of ridges, bears N. 40° E. and S. 40° W.; thence
over low hills, still descending.

19.40 Trail bears S. 15° E. and N. 15° W.

21.20 Wash about 8 lks. wide and 4 ft. deep, drains N.E.

28.50 Trail bears N. and S.

29.26 W. foot of high ridge bears S. 10° E. and N. 10° W.; as-
cend over W. slope of ridge; leave low hills.

44.96 Set a trachyte stone 15x8x5 ins., 10 ins. in the ground
for 1/4 sec. cor., marked 1/4 on N. face; and raised a
mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.
Pits impracticable. The cor. is on W. slope about 200
ft. above foot of ridges.

51.00 Top of ridge about 250 ft. high, bears N.E. and S.W.;
descend over E. and S.E. slopes of broken ridges.

84.96 The cor. of secs. 19, 20, 29 and 30, near foot of S.E.
slope about 250 ft. below top of ridge.

73.40
71.56 Land mostly mountainous and broken ridges with nar-
row strip near W. side of Tp., low rolling hills.

Soil, clay, gravelly and stony; 2nd., 3rd. and 4th. rate.

Timber, scattering cedars and juniper on W. 72.00 chs.

Medium dense sage undergrowth with shrubbery and

55

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	grasses in sufficient quantity to make good grazing. Mountainous land on 73.40 chs.
	N., 0° 3' W., bet. secs. 19 and 20. Ascend over S.E. slope of ridge.
6.00	Top of ascent on E. slope of high ridge, about 75 ft. above the sec. cor., bears E. and W.; descend along E. slope of ridge.
15.00	N.E. foot of ridge bears S.E. and N.W.; thence descend gradually over E. slope of low hills.
20.50	Enter scattering cedars bears E. and W.
28.06	Road from Enterprise to the wood hills, bears S.E. and N.W.
33.20	Trail bears N.W. and S.E.
40.00	Set a trachyte stone, 12x12x5 ins., 8 ins. in the ground for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable. Cor. on E. slope about 50 ft. below N.E. foot of ridge.
46.60	Trail bears N. 50° W. and S. 50° E.
64.78	Trail bears N. 35° W. and S. 35° E.
79.00	Wash about 20 lks. wide and 5 ft. deep, drains E. 1.00 ch thence N. 40° E.
80.00	Set a trachyte stone 18x12x6 ins., 12 ins. in the ground, for cor. of secs. 17, 18, 19 and 20, marked with 3 notches on S. and 5 notches on E. edges; from which A cedar 12 ins. diam., bears N. 28° 45' E., 116 lks. dist. marked T.36 S., R.17 W., S.17, B.T. Land mostly rolling, with course of drainage to E. and N.E.; 15.00 chs. on S. mountainous and broken ridges. Soil, clay loam and gravelly on rolling land and gravelly and stony on the ridges; 2nd. and 3rd. rate. Timber, scattering cedars on N. 59.50 chs.

$$\frac{N. 0^{\circ} 0'}{S. 0^{\circ} 0'}$$

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	<p>Medium dense undergrowth of sage with shrubbery and grasses afford fair grazing.</p> <p>Mountainous land on 15.00 chs.</p> <p>November 23, 1899.</p>
40.00	<p>S., $89^{\circ}51'$ E. on a random line bet. secs. 17 and 20.</p> <p>Set temp. $1/4$ sec. cor.</p>
80.12	<p>Intersect N. and S. line, 21 lks. N. of the cor. of secs. 16, 17, 20 and 21, heretofore described.</p> <p>November 24, 1899: At this sec. cor., I set off $370^{\circ}40'$ N. on the lat. arc; $20^{\circ}35'30''$ S. on the decl. arc; and, at 9^h47^m, a.m., l.m.t., determine a true meridian with the solar; thence I run</p> <p>N., $89^{\circ}42'$ W. on a true line bet. secs. 17 and 20.</p> <p>Gradually ascend over rolling ground; through dense sage undergrowth.</p>
5.50	Enter scattering cedars bears N. and S.
20.35	<p>Begin ascent of ridges, about 25 ft. above the sec. cor. bears N. and S.; leave rolling land.</p> <p>Leave dense sage undergrowth and enter scattering sage and juniper, bears N. and S.</p>
28.35	Top of ascent on N. slope of ridge, about 75 ft. above foot of same, bears N.E. and S.W.; descend over N.W. slope.
33.35	Foot of descent about 40 ft. below top of last ridge, drains N.; ascend along E. and N.E. slopes of ridges.
40.06	<p>Set a trachyte stone $16 \times 10 \times 6$ ins., 11 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, $1\ 1/2$ ft. high, N. of cor. Pits impracticable. Cor. is on N.E. slope of ridge about 75 ft. above foot of last descent.</p>
44.35	<p>Top of ascent on N.E. slope of ridge, about 50 ft. above the $1/4$ sec. cor., bears N.E. and S.W.; descend over N.W. slope of ridges.</p>

Subdivisions of T.36 S., R.17. W.-Continued.

Chains.

- 46.35 Leave scattering cedars and juniper bears N. and S.
- 54.85 W. foot of ridges about 75 ft. below top of ridges, bears N. 20° E. and S. 20° W. road from Hebron and Enterprise to Modena, bears S. 20° W. and N. 20° E..
- Leave scattering sage and enter dense sage undergrowth bears N.E. and S.W.; ascend gradually over slightly rolling land, with general course of drainage to N.E.
- 57.35 Wash about 12 lks. wide and 3 ft. deep, drains N. 25° E.
- 74.85 Trail bears N. 35° E. and S. 35° W.
- 78.85 Wash about 45 lks. wide and 6 ft. deep, drains N. 40° E.
- 80.12 The cor. of secs. 17, 18, 19 and 20.
- Land mountainous and broken ridges, and rolling . . .
- Soil, clay loam intermixed with gravel below the ridges, and gravelly and stony on the ridges; 2nd. 3rd. and 4th. rate.
- Timber, scattering cedars and juniper on E. part and scattering cedars surrounding the corner.
- Sage undergrowth, shrubbery and grasses afford fair grazing.
- Mountainous land or land covered with dense undergrowth on 80.12 chs.

- S. $89^{\circ} 45'$ W., on a random line bet. secs. 18 and 19.
- 40.00 Set temp. $1/4$ sec. cor.
- 85.20 Intersect W. bdy. of Tp., [✓]49 lks. N. of the old cor. of secs. 13, 18, 19 and 24, which is a trachyte stone 15x12 x6 ins. above ground, marked and witnessed as described by the Surveyor General.
- Thence I run
- N. $89^{\circ} 25'$ E. on a true line bet. secs. 18 and 19.
- Descend over slightly rolling land; through scattering cedars and juniper; and medium dense sage under-

Subdivisions of T.36 S., R.17 W.-Continued.

Chains growth.

- 10.00 Leave scattering junipers bears N. and S.; continue in scattering cedars.
- 13.25 Trail bears S. 15° E. and N. 15° W.
- 32.00 Wood road from Hebron to the wood hills, bears S. 70° E. and N. 70° W.
- 43.20 Trail bears N.W. and S.E.
- 45.20 Set a lava stone 22x8x6 ins., 17 ins. in the ground, for $1/4$ sec. cor., marked $1/4$ on N. face; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, N. of cor. Pits impracticable.
- 66.00 Leave scattering cedars and medium dense sage undergrowth bears N. and S.; enter dense sage undergrowth
- 85.20 The cor. of secs. 17, 18, 19 and 20.
- 19.20
66.00 Land slightly rolling with general course of drainage to E. and N.E.
- Soil, clay loam and gravelly-stony in parts; 2nd. and 3rd. rate.
- Timber, scattering cedars and juniper on W. 66.00 chs. and a few cedars surrounding the cor.
- Undergrowth, shrubbery and grasses all along the line in sufficient quantity to make good grazing.
- Dense sage undergrowth on 19.20 chs.
- November 24, 1899: At this cor. of secs. 17, 18, 19 and 20, I set off $20^{\circ}37'$ S. on the decl. arc; and, at 11h47m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ}40'$ " N.

N. $0^{\circ}3'$ W., bet. secs. 17 and 18.

Over rolling land, descending, through dense sage undergrowth.

8.60 Trail bears N.W. and S.E.

10.80 Wash about 20 lks. wide and 5 ft. deep, drains S. 75° E. along foot of ridges; ascend over S. slope of ridges.

59
Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	Enter scattering cedars bears S.E. and N.W.; leave dense sage undergrowth and enter medium dense sage.
17.00	Top of ridge about 75 ft. high, bears S. 80° E. and N. 80° W.; thence over top of ridge.
28.00	Commence to descend over N. slope of ridge, bears E. and W..
32.00	Leave scattering cedars.
35.00	Foot of descent about 40 ft. below top of ridge drains along foot of ridges on N.E. course.; ascend over S.E. slope of ridge.
40.00	Set a volcanic stone 14x10x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
54.00	Top of ridge about 75 ft. high, bears S. 35° W. and N. 35° E.; descend over N.W. slope of ridge.
69.00	Foot of descent about 50 ft. below top of last ridge drains N. 60° E. along foot of ridges; ascend over S. E. slope of ridge.
78.00	Top of ridge about 75 ft. high, bears N. 50° E. and S. 50° W.; thence along top of ridge.
80.00	Set a trachyte stone 15x10x6 ins., 10 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, marked with 4 notches on S. and 5 notches on E. edges; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
	Land mostly mountainous and broken ridges with S. 1/8 mile slightly rolling.
	Soil, gravelly and stony; 3rd. rate.
	Timber, scattering cedars in S. 1/2 of sections.
	Sage undergrowth with shrubbery and grasses afford fair grazing.
	Mountainous land or land covered with dense sage undergrowth on 80.00 chs.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	S., 89° 42' E. on a random line bet. secs. 8 and 17.
40.00	Set temp. 1/4 sec. cor.
80.16	Intersect N. and S. line, 14 lks. S. of the cor. of secs. 8, 9, 16 and 17, heretofore described.
	Thence I run
	N. 89° 48' W., on a true line bet. secs. 8 and 17.
	Ascend over E. slope of ridges.
8.80	Road from "Hebron" to Modena, bears S. and N., joins road from St. George to Modena at about 20.00 chs.
	N. 20° W.
40.08	Set a trachyte stone 14x8x6 ins., 10 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable. Cor. on S. E. slope of ridges about 75 ft. above the sec. cor.
52.00	Top of ridge about 30 ft. above the 1/4 sec. cor., bears N. 85° E. and S. 25° W.; descend over N. W. slope.
66.00	Foot of descent about 50 ft. below top of ridge, bears N. E. and S. W.; ascend over S. E. slope of ridge.
78.00	Top of ridge about 50 ft. high, bears N. 70° E. and S. 70° W.; thence along top of ridge.
80.16	The cor. of secs. 7, 8, 17 and 18.
	Land mountainous and broken ridges.
	Soil, clay and gravelly with parts stony; 3rd. and 4th. rate.
	No timber.
	Medium dense sage with shrubbery and grasses afford fair grazing.
	Mountainous land on 80.16 chs.

S. 89° 25' W. on a random line bet. secs. 7 and 18.

40.00 Set temp. 1/4 sec. cor.

85.29 Intersect W. bdy. of Tp., 42 lks. S. of the old cor. of secs. 7, 12, 13 and 18, which is a granite stone 10x6

Subdivisions of T.36 S., R.17 W.-Continued.

Chains x5 ins. above ground, marked and witnessed as described by the Surveyor General.

Thence I run
N., $89^{\circ}42'$ E. on a true line bet. secs. 7 and 18.
Descend gradually over E. slope, slightly rolling, through medium dense sage undergrowth.

30.60 Hollow about 50 lks. wide and 25 ft. deep, drains N.E.
Enter dense sage undergrowth bears N.E. and S.W.; leave medium dense sage.

45.29 Set a trachyte stone $18 \times 8 \times 5$ ins., 12 ins. in the ground for $1/4$ sec. cor., marked $1/4$ on N. face; dug pits 18×12 ins., E. and W. of stone, 3 ft. dist.; and raised a mound of earth, $3 \frac{1}{2}$ ft. base, $1 \frac{1}{2}$ ft. high, N. of cor.

53.45 Wash about 15 lks. wide and 3 ft. deep, drains S. 15° E.

59.60 Recross same wash drains N. 60° E.

70.60 Foot of ridges bears N. 50° E. and S. 50° W.; ascend over N.W. slope of ridges; leave dense sage undergrowth bears N.E. and S.W.; enter medium dense sage.

85.29 The cor. of secs. 7, 8, 17 and 18, on top of ridge about 100 ft. above foot of ridge.

5469
3060
Land, mountainous and broken ridges on E., and nearly level, slightly rolling on W.
Soil, clay loam and gravelly; 2nd. and 3rd. rate.
No timber.
Sage undergrowth, with an abundance of shrubbery and grasses make good grazing.
Mountainous land or land covered with dense undergrowth on 54.69 chs.

November 24, 1899.

November 25, 1899: I set off $37^{\circ}41'$ N. on the lat. arc; $20^{\circ}46'$ S. on the decl. arc; and, at 8h47m a. m., l. m. t., determine a true meridian with the solar, at the cor. of secs. 7, 8, 17 and 18, heretofore described

Subdivisions of T.36 S., R.17 W.-Continued.

Chains	Thence I run N., 0° 3' W., bet. secs. 7 and 8. Descend over N.W. slope of ridge; through medium dense sage undergrowth.
10.00	Foot of ridges about 50 ft. below the sec. cor., bears N. 60° E. and S. 60° W.; thence over nearly level land.
12.60	Wash about 10 lks. wide and 3 ft. deep, drains N. 70° E.
15.00	Road from Hebron to Modena bears S. 75° W. and N. 60° E.
16.00	Foot of ridges bears N. 75° E. and S. 75° W.; ascend over S.E. slope of ridges.
27.00	Top of ridge about 50 ft. high, bears N. 65° E. and S. 65° W.; thence along top of ridges, still ascending.
37.00	Commence to descend over N.E. slope of ridges.
40.00	Set a trapstone 16x12x6 ins., 11 ins. in the ground for 1/4 sec. cor., marked 1/4 on W. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor. Pits impracticable.
60.00	Foot of descent, about 50 ft. below top of last ridge, drains S. 80° E.; ascend over S.W. slope of ridges.
61.30	Trail bears S.E. and N.W.
75.00	Top of ridge about 75 ft. above foot of descent, bears S. 40° E. and N. 40° W.; descend over N.E. slope of ridge.
80.00	Set a granite stone 16x8x6 ins., 11 ins. in the ground, for cor. of secs. 5, 6, 7 and 8, marked with 5 notches on S. and E. edges; dug pits 18x18x12 ins. in each sec., 5 1/2 ft. dist.; and raised a mound of earth, 4 ft. base 2 ft. high, W. of cor. Land mostly mountainous and broken ridges; narrow strip along the road almost level, slightly rolling. Soil, clay and gravelly; 2nd. and 3rd. rate. No timber. Medium dense sage with shrubbery and grasses in abundance affords good grazing. Mountainous land on 74.00 chs.

Subdivisions of T.36 S., R.17 W.-Continued.

Chains.	S. 89° 48' E on a random line bet. secs. 5 and 8.
40.00	Set temp. 1/4 sec. cor.
80.12	Intersect N. and S. line 12 <u>Ch. N.</u> of cor. of secs. 4, 5, 8 and 9, heretofore described.
	Thence I run
	N., 89° 43' W. on a true line bet. secs. 5 and 8.
	Descend over W. slope of ridges.
8.88	Trail bears N. 10° E. and S. 10° W.
9.45	Wash at foot of descent about 15 ft. below the sec. cor., about 12 lks. wide and 2 ft. deep, drains S. 10° W.; ascend from wash over S. E. slope of ridges.
28.00	Top of ridge about 75 ft. high, bears N. and S.; descend over S. W. slope of ridges.
40.06	Set a trachyte stone 22x10x8 ins., 16 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face; and raised a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
57.55	Trail bears N. 10° W. and S. 10° E.
58.00	Foot of descent about 50 ft. below top of last ridge, drains S. 10° E.; ascend gradually.
68.85	Trail bears S. 40° E. and N. 40° W.
69.15	Road from St. George to Modena, bears S. 40° E. and N. 40° W.; ascend over E. slope of ridges same course as road.
80.12	To the cor. of secs. 5, 6, 7 and 8, on top of ridge, about 50 ft. above the road and foot of ridges.
68.97 11.15	Land mostly mountainous and broken ridges with narrow strip along the road between the ridges almost level. Soil, clay and gravelly with streaks of stony ground; 2nd. and 3rd. rate.
	No timber.
	Medium dense sage undergrowth with shrubbery and grasses afford fair grazing.
	Mountainous land on 68.97 chs.

Subdivisions of T.36 S.;R.17 W.-Continued.

- Chains. *S 89° 42' W.* on a random line bet.secs.6 and 7..
- 40.00 Set temp.1/4 sec.cor.
- 84.95 Intersect W.bdy.of Tp., *20° 48' S.* cor.of secs.1, 6,7 and 12,which is a granite stone 12x4x6 ins.above ground,marked and witnessed as described by the Surveyor General.
- Thence I run
- N.,89° 50' E.on a true line bet.secs.6 and 7.
- Descend over low ridges and hollows with general course of drainage Southeasterly.
- 29.82 Trail bears N.W.and S.E.
- 44.95 Set a porphyry stone 14x10x6 ins.,10 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on N.face;dug pits 18x18x12 ins.,E.and W.of stone,3 ft.dist.;and raised a mound of earth,3 1/2 ft.base,1 1/2 ft.high, N.of cor. Cor.is on S.slope of low ridge about 50 ft.below the sec.cor.
- 48.75 Foot of descent about 15 ft.below the sec.cor., drains S.3.00 chs.,thence S.60° E.;ascend over N.W. slope of ridges.
- 54.75 Top of ridges about 50 ft.high,bears N.E.and S.W.; thence over top of ridge still ascending.
- 63.75 Commence descent over E.slope of ridges,bears N.20° E.and S.20° W.
- 74.75 Foot of descent about 40 ft.below top of last ridge, drains S.20° W.;ascend
- 84.95 The cor.of secs.5,6,7 and 8.
- Land mountainous and broken ridges.
- Soil,clay and gravelly with very little stony ground in W.part of secs;2nd.and 3rd.rate.
- No timber.
- Medium dense sage undergrowth with sufficient shrubbery and grasses to make good grazing.
- Mountainous land on *84.95* chs.

November 25,1899:At this cor.of secs.5,6,7 and 8, I set off 20° 48' 30" S. on the decl.arc;and,at 11h47m

Subdivisions of T.36 S., R.17 W.-Continued.

Chains. a.m., l.m.t., observe the sun on the meridian; the resulting lat. is $37^{\circ}42'$ N.

November 25, 1899: I set off $37^{\circ}42'$ N. on the lat. arc.; $20^{\circ}49'$ S. on the decl. arc.; and, at 2^h00m p. m., l.m.t., determine a true meridian with the solar, at the cor. of secs. 5, 6, 7 and 8, heretofore described. Thence I run

N. $00^{\circ}3'$ W. on a true line bet. secs. 5 and 6, knowing that a closing cor. will be necessary on N. bdy. of Tp. (7th. Standard Parallel South.)

Ascend along top of ridge over small knolls and hollows.

10.00 Road from St. George to Modena, bears S. 40° E. and N. 40° W.

40.00 Set a trachyte stone 12x10x6 ins., 8 ins. in the ground for $1/4$ sec. cor., marked $1/4$ on W. face; and raised a mound of stone, 2 ft. base, 1 $1/2$ ft. high, W. of cor. Pits impracticable. Cor. on top of ridge which bears N. and S., about 75 ft. above the sec. cor. Thence along top of ridge, still ascending.

43.46 Commence to descend over N.E. slope of ridges.

53.21 Foot of descent about 75 ft. below top of last ridge, bears E. and W.; ascend over S.E., S. and S.W. slopes of ridges.

88.23 Trail bears N. 50° W. and S. 50° E.

103.46 Top of ascent of ridges, about 100 ft. above foot of last descent, bears N. and S. 40° W.; descend over N. and N.E. slope of ridges.

117.96 Foot of descent about 100 ft. below top of last ascent bears N.E. and S.W.; ascend over S.E. slope of ridge.

123.46 Top of ridge about 150 ft. above foot of last descent bears N. and S.; thence along top of ridge.

132.46 Commence to descend over N.E. slope of ridges., bears

Subdivisions of T.36 S., R.17 W.-Continued.

Chains N.25° W. and S.

144.46 N.E. Foot of high ridge or mountain about 150 ft. below top of same, bears N.30° W. and N.70° E.; thence over ridges and foot hills, still descending.

161.46 Intersect 7th. Standard Parallel South, 27.05 chs. W. of the standard cor. of secs. 31 and 32, T.36 S., R.17 W. which is a granite stone 17x9x6 ins. in a mound of stone, marked and witnessed as described by the Surveyor General.

Set a trachyte stone 15x10x4 ins., 10 ins. in the ground, for closing cor. of secs. 5 and 6, marked C.C. on S., with 5 grooves on E. and 1 groove on W. faces; dug pits 18x18x12 ins., crosswise on each line E. and W., 3 ft., and S. of stone, 7 ft. dist.; and raised a mound of earth, 4 ft. base, 2 ft. high, S. of cor.

Land mountainous and broken ridges.

Soil, clay and gravelly with streaks of stony ground; 2nd. 3rd. and 4th. rate.

No timber.

Medium dense undergrowth, shrubbery and grasses, afford good grazing.

Mountainous land on 161.46 chs.

November 25, 1899.

Subdivisions of T.36. S., R.17. W.-Continued.

GENERAL DESCRIPTION.

The East boundary of this Tp. lies along the S. Western border of the Escalante Desert-a part of the Great American Desert-at the E. foot of slope adjoining the foot hills and ridges; the N. and S. bds. lie along high mountains and ridges cut with narrow hollows and canons; and the W. bdy. crosses low broken ridges.

The interior surface is made up of high mountains and ridges, low ridges and narrow valleys; and the general course of drainage through the Tp. is towards the Shoal Creek wash-the Southwestern part draining Southerly toward the wash and the E. and Central parts draining E. and N.E. in the direction of this wash. In the Northwestern part of the Tp. a small area drains Northerly and Northwesterly to the Desert.

Throughout the Township the soils are generally rich-gravelly in the narrow valleys and on the low ridges, and gravelly and stony on the mountains and higher ridges; and the ground is covered with undergrowth, shrubbery and grasses in abundance, which afford good grazing.

The supply of timber is limited in quantity, consisting of scattering cedars and nut pine, small tracts of which are medium dense, principally in the S. Central, S. Western and W. Central parts of the Tp., where fuel and fence material is obtained by the citizens of the towns of Hebron and Enterprise.

There are no lakes, ponds, rivers, streams or springs of water in the Tp.; and animals grazing therein must necessarily travel long distances to watering places.

Subdivisions of T.36 S., R.17 W.-Continued.

There are no permanent settlers in the Township. Lyman Canfield of Hamblin has constructed two log cabins in section / , at a cost of about \$100.00. The only other improvements are a miners log cabin and dugout in sec. 2 , of the value of about \$50.00, and development work on mining claims in secs. 2, 3, 10 and 11.

No stone quarries, lime quarries or lime kilns are found in the Tp., and there are no indications of coals, fossils or petrefactions.

There are a number of mineral locations with prospect holes, old and new, which, owing to conflicting monuments the boundaries thereof would be difficult to determine. These claims are situated along the ridges in secs. 1, 2, 3, 10, 11, 14 and 15, and there are indications along this ridge of the presence of copper and silver ores; and I hereby return as mineral lands the following subdivisions:

The W. 1/2 of S.W. 1/4 of sec. 1; the lot numbered 213 of sec. 1; the S. 1/2 and the lot numbered 224 of sec. 2; S.E. 1/4 of sec. 3; E. 1/2, N.W. 1/4, E. 1/2 of S.W. 1/4, N.E. 1/4 and S.E. 1/4 of sec. 10; W. 1/2 of sec. 11; N. 1/2 of N.E. 1/4, and W. 1/2 of S.E. 1/4 of sec. 11; N.W. 1/4 of N.E. 1/4, N.W. 1/4, and N. 1/2 of S.W. 1/4 of sec. 14; and N.E. 1/4, N. 1/2 of S.E. 1/4 and E. 1/2 of N.W. 1/4 of sec. 15.

November 25, 1899.

Matthew H. Dalley
U.S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by

....., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of

showing the respective capacities in which they acted:

....., Chainman.

....., Chainman.

....., Moundman.

....., Moundman.

....., Axman.

....., Axman.

....., Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted

....., United States Deputy Surveyor, in surveying all those parts or portions of the

..... of the meridian, of, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for

....., Chainman.

....., Chainman.

....., Moundman.

....., Moundman.

....., Axman.

....., Axman.

....., Flagman.

Subscribed and sworn to before me this

day of, 189 }



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Mayhew H. Valley, United States Deputy Surveyor,
solemnly swear that, in pursuance of a contract received from Jacob B. Hain
United States Surveyor General for Utah, bearing date of 23
day of January, 1899, I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Surveyor
General for Utah, the Manual of Surveying Instructions, and the laws of the
United States, surveyed all those parts or portions of The subdivision of
Township 36 South Range 17 West

Base and meridian, in the State of Utah, of the Salt Lake
which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further sole
swear that all the corners of said survey have been established and perpetuated in strict accordance
the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor
General for Utah, and in the specific manner described in the field notes, and
the foregoing are the original field notes of such survey; and should any fraud be detected, I will
the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Mayhew H. Valley
United States Deputy Surveyor

Subscribed by said Mayhew H. Valley and sworn to before me
this 31st day of May, 1901



Edward H. Henderson
U. S. Surveyor General for Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 17 1902
The foregoing field notes of the survey of The subdivision of Township 36 South Range 17 West of the Salt Lake Base and Meridian, Utah

executed by Mayhew H. Valley
under his contract No. 224, dated January 23, 1899, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and
surveys they describe, are hereby approved.

Edward H. Henderson
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in
has been correctly copied from the original notes on file in this office

United States Surveyor General